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AUSTRALIAN MUSEUM, SYDNEY.

(CATALOGUE No. 15.)

CATALOGUE

OF THE

MARINE SHELLS OF AUSTRALIA AND TASMANIA.

PART I. 3.

CEPHALOPODA.

PTEROPODA. 2

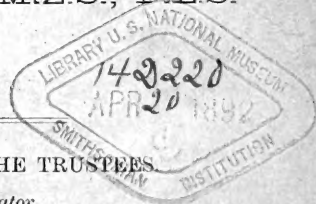
GASTEROPODA. 3

BY

JOHN BRAZIER, C.M.Z.S., F.L.S.

PRINTED BY ORDER OF THE TRUSTEES.

E. P. Ramsay, Curator.



Sydney :

CHARLES POTTER, GOVERNMENT PRINTER, PHILLIP-STREET.

1892.

LIST OF THE CEPHALOPODA IN THE COLLECTION OF THE
AUSTRALIAN MUSEUM.

By J. BRAZIER.

ARGONAUTA ARGO, Linné. Shells and animal in spirits.
Port Stephens, New South Wales.

ARGONAUTA NODOSA, Solander. Shells and animal in spirits.
Port Stephens, New South Wales ; Tasmania.

ARGONAUTA HIAN, Solander.
China Sea and South Atlantic.

OCTOPUS GRANULATUS, Lamk.
Port Jackson.

OCTOPUS AUSTRALIS, Hoyle.
Port Jackson.

OCTOPUS PICTUS, Brock.
Port Jackson ; Tasmania.

OCTOPUS LUNULATUS, Quoy et Gaimard.
Uji Island, Solomon Islands.

OCTOPUS MACROPUS, Risso.
Port Jackson, New South Wales ; one foreign.

OCTOPUS CYANEA, Gray.
Port Jackson, New South Wales ; Uji Island, Solomon Islands.

ELEDONE MOSCHATA, Lamk.
Bay of Naples, Italy.

ELEDONE CIRROSA, Lamk.
Bay of Naples, Italy.

INIOCTEUTHIS STENODACTYLA, Grant.
Port Jackson, New South Wales.

ROSSIA MACROSOMA, delle Chiaje.
Bay of Naples, Italy.

SEPIOLOIDEA LINEOLATA, Quoy et Gaim.

Port Jackson, New South Wales ; Nelson Bay, Port Stephens,
New South Wales.

SPIRULA PERONI, Lam.

Port Jackson ; Lord Howe Island ; Ovalu, Fiji ; New Zealand.

SEPIA PIANGON, Gray.

Port Jackson.

SEPIA APAMA, Gray.

Port Jackson.

SEPIA INDICA, d'Orb.

Strait Settlement.

SEPIA MESTUS, Gray.

Port Jackson.

SEPIOTEUTHIS LUNULATA, Quoy et Gaimard.

Port Jackson, New South Wales ; Bougainville Island ; Solomon
Islands.

SEPIOTEUTHIS AUSTRALIS, Quoy et Gaim.

Port Jackson, New South Wales.

SEPIOTEUTHIS LESSONIANA, d'Orb.

Frazer's Island, Queensland ; Uji Island, Solomon Islands ; New
Zealand.

SEPIOTEUTHIS MAURITIANA, Quoy et Gaimard.

Port Jackson, New South Wales.

LOLIGO DUVAUCELI, d'Orb.

Karache, India.

LOLIGO AUSTRALIS, Gray.

Port Jackson.

LOLIGO EDULIS, Hoyle.

Port Jackson.

LOLIGO SUMATRENSIS, d'Orb.

Malacca.

LOLIGO PEALEI, Lesueur.

Atlantic coast of the United States of America.

OMMASTREPES GIGAS, d'Orb.

Lord Howe Island ; Perim Island, Red Sea ; Bougainville Island,
Solomon Islands.

TODARADES SAGITTATUS, Lamk.

Bay of Naples, Italy.

ONYCHOTEUTHIS BANKSI, Leach.

South Pacific, jumped on board H.M.S. "Comorant" Lat. 21 S.,
Long. 163 E., off the island of Tristan d'Achuna, presented by
Captain Goddard, ship "Parramatta."

NAUTILUS POMPILIUS, Linné. Shell and animal in spirits.

Woodlark Island ; Torres Straits ; New Caledonia ; New Hebrides.

NAUTILUS STENOMPHALUS, Sowerby.

Torres Straits.

NAUTILUS MACROMPHALUS, Sowerby. Shell and animal.

Isle of Pines, New Caledonia.

NAUTILUS UMBILICATUS, Lister.

Solomon Islands.

AUSTRALIAN MUSEUM, SYDNEY.

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PART I.

CEPHALOPODA.

BY

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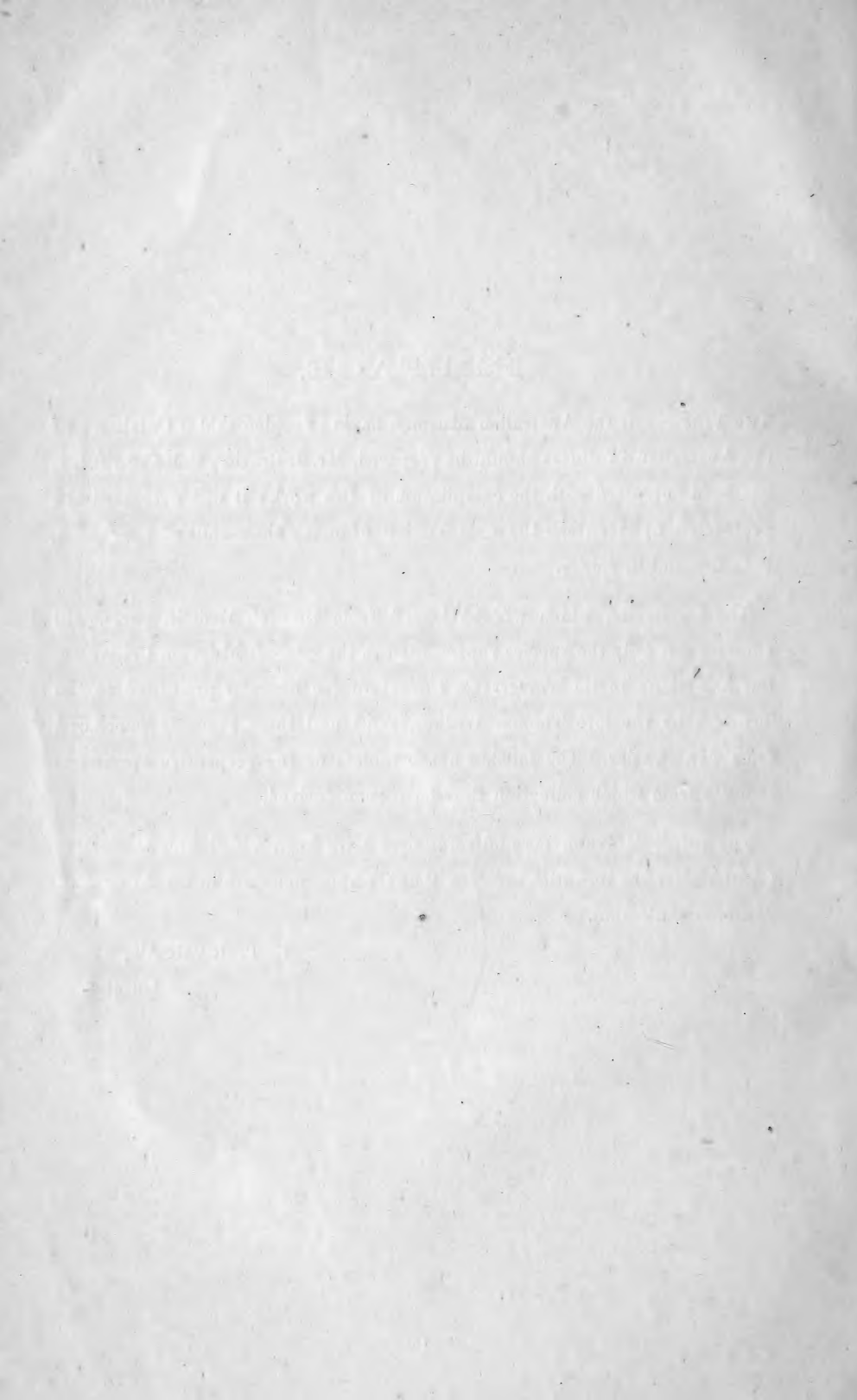
PREFACE.

THE Trustees of the Australian Museum having decided that a Catalogue of the Australian Mollusca should be prepared, Mr. J. Brazier, C.M.Z.S., F.L.S., has been entrusted with the compilation of this work; it will necessarily be protracted, as it entails the examination of many thousands of specimens, both dry and in spirits.

The Catalogue, which will be issued from time to time in parts, will embrace not only the species represented in the general Museum Collection, but also those in the Hargrave's Collection (so liberally presented to the Trustees by the late Thomas Walker, Esq.) and those recently purchased from Mr. Brazier. The labels on the tablets of the respective specimens indicate from which collection they have been derived.

The principal synonyms and references have been added, and the letters (A.M.) after the localities indicate that the specimens are in the Australian Museum Collection.

E. P. RAMSAY,
Curator.



CATALOGUE
OF
MARINE SHELLS OF AUSTRALIA AND TASMANIA.

PART I.—CEPHALOPODA.

IN this Part of the Catalogue are enumerated all the species of the recent Australian Cephalopoda, known to the Author or which have been described, from the coasts of Australia and Tasmania.

In compiling this portion of the Catalogue I have availed myself of the information contained in Mr. William Evans Hoyle's Report on the Cephalopoda, collected during the voyage of H.M.S. "Challenger."

JOHN BRAZIER.

Class CEPHALOPODA, Cuvier.

Order DIBRANCHIATA, Owen, 1832.

Sub-order OCTOPODA, Leach, 1818.

Family ARGONAUTIDÆ, Cantraine, 1841.

ARGONAUTA, Linné, 1756.

Argonauta argo, Linné.

Argonauta argo, Linn., Syst. Nat., ed X, p. 708, No. 282, 231, 1758.

Nautilus papyraceus, Martini, Conch. Cab., Vol. I, p. 231, pl. 17, fig. 157, 1769.

Nautilus papyraceus parvus, Martini, Conch. Cab., Vol. I, p. 238. Vignette 8, fig. 2, p. 221, 1769.

Argonauta striata, Perry, Conch. pl. 42, fig. 2, 1811.

Argonauta grandiformis, Perry, Conch. pl. 42, fig. 4, 1811.

Argonauta haustum, Dillwyn, Catal., Vol. I, p. 335, 1817.

Argonauta argo, d'Orb., Céph. Acét. p. 158. Argonaute, pl. 2, figs. 1-2, 1835-1848.

Argonauta Gruneri, Dunker, Zeitschr. f. Malak, p. 48, 1852.

Argonauta argo, Reeve, Conch., Icon., pl. 3, fig. 2°, 1861.

Argonauta haustum, Reeve, Conch., Icon., pl. 2, 1861.

Argonauta argo, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., Lond., p. 185, 1867.

Argonauta pacifica, Dall, American Journal. Conch., Vol. III, p. 95, 1872.

Argonauta argo, E. von Martens, Ann. Mag. Nat. Hist., 3rd series, Vol. XX, p. 104, 1867.

Argonauta argo, Tryon, Manual of Conchology, Vol. I, p. 138, pl. 47, figs. 111, 112; pl. 48, figs. 116, 117, 1879.

Argonauta argo, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 4, 69, 1886.

Habitat.—Port Jackson Heads, Manly Beach, Port Stephens (A.M.), New South Wales; North Queensland, and Torres Straits.

Argonauta nodosa, Solander.

Argonauta nodosa, Solander, Portl. Catal., 76, 2120, Vol. II, p. 113, 1786.

Argonauta navicula, Solander, Portl. Catal., 42, 1055 (= *forma aurita*), Vol. II, p. 112, 1786.

Argonauta oryzata, Meuschen, Mus. Gevers, 252, No. 133, 1787.

Argonauta tuberculata, Shaw, Nat. Hist., Miscell., Vol. XXIII. tab. 995, 1790.

Argonauta vitrea, Perry, Conchology, pl. 42, fig. 1, 1811.

Argonauta gondola, Dillwyn, Desc. Catal., Vol. I, p. 335, 1817 (= *forma aurita*).

Argonauta tuberculosa, Schumacher, Essai d'un Nouv. Syst., p. 260, 1817.

Argonauta tuberculosa, Lamk., Anim. s. vert., VII, p. 632, 1822.

Argonauta tuberculata, d'Orb., Céph. Acét., p. 169, Argonaute, pl. 3, 4 (pl. 4, = *forma aurita*), 1835.

Argonauta tuberculosa, Reeve, Conch. Icon., pl. 1, 1861 (= *forma mutica*).

Argonauta oryzata, Angas, Molluscan Fauna of South Australia, Proc. Zool. Soc., Lond., p. 156, 1865.

Argonauta oryzata, Angas, Marine Mollusca found in Port Jackson, Proc. Zool. Soc., Lond., p. 185, 1867.

Argonauta tuberculata, E. von Martens, Ann. Mag. Nat. Hist., 3rd series. Vol. XX, p. 104, 1867.

Argonauta nodosa, Tryon, Manual of Conchology, Vol. I, p. 140, pl. 50, fig. 124, 1879.

Argonauta tuberculosa, Hutton, Manual of New Zealand Mollusca, p. 2, 1880.

Argonauta tuberculata, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 4, No. 2, 1886.

Habitat.—Outer Manly Beach, Newcastle, Port Stephens (A.M.), New South Wales; Tasmania (A.M.), South Australia, New Zealand.

Argonauta hians, Solander.

Nautilus tenuis, Martini, Conch. Cab., Vol. I, p. 235, pl. 17, figs. 158, 9, 1769.

Argonauta hians, Solander, Portl. Catal., p. 44, lot 1,055, Vol. II, p. 113, 1786.

Argonauta nitida, Lamk., Anim. sans Vert., t. VII, p. 653, 1822.

Argonauta gondola, Dillwyn, Vol. I, p. 335, No. 4, 1817.

Argonauta hians, Dillwyn, Vol. I, p. 334, No. 3, 1817.

Argonauta hians, Ad. and Reeve, Voy. "Samarang," Mollusca, part 1, p. 4, No. 2, pl. 3, fig. 2^{a, b, c}, 1848.

Argonauta hians, d'Orb., Céph. Acét., p. 174, Argonaute, pl. 5, 1835.

Argonauta gondola, Ad. and Reeve, Voy. "Samarang," p. 3, No. 1, pl. 2, 1848.

Argonauta Owenii, Ad. and Reeve, Voy. "Samarang," p. 4, No. 3, pl. 3, fig. 1, 1848.

Argonauta hyans, Gray, Ceph. Antep., Brit. Mus. Cat., p. 33, 1849.

Argonauta Kochiana, Dunker, Zeitschr. f. Malak, p. 49, 1852.

Argonauta gondola, Reeve, Conch. Icon., pl. 4, figs. 3^a–3^b, 1861.

Argonauta hians, Hoyle, Report on the Cephalopoda, II.M.S. "Challenger," Zoölogy, Vol. XVI, p. 5, No. 3, 1886.

Habitat.—Moreton Bay, Queensland. (Strange.)

Argonauta Böttgeri, Maltzan.

Argonauta Böttgeri, Maltzan, Journal de Conchyliologie, Vol. XXIX, p. 163, pl. 6, fig. 7, 1881.

Argonauta Böttgeri, E. A. Smith, Ann. and Mag. Nat. Hist., Vol. XX, 5th series, p. 109, pl. 17, figs. 1–6, 1887.

Habitat.—Australia.

Family OCTOPODIDÆ, d'Orbigny.

OCTOPUS, Lamarck, 1799.

Octopus Boscii, Lesueur.

Sepia rugosa, Peron, MS.

Sepia Boscii, Lesueur, Journal Acad. Nat. Sci., Philad., Vol. II, p. 101, 1821.

Octopus variolatus, Peron, Blainv., Dict. de Sci. Nat., t. XLIII, p. 186, 1826.

Octopus Boscii, d'Orb., Mon. des Céph. Acét., p. 68, 1838.

Octopus Boscii, Gray, Brit. Mus. Catal., p. 12, 1849.

Octopus Boscii, var *pallida*, Hoyle, Diagnoses I, p. 223, 1885; II.M.S. "Challenger," Report, Zoology, Vol. XVI, pp. 81, 82, pl. 1; pl. 2, fig. 2, 1886.

Habitat.—Western Australia; East Moncœur Island, Bass Strait, 38 fathoms, sand and shells; Twofold Bay, New South Wales, 150 fathoms, green mud. ("Challenger.")

Octopus granulatus, Lamareck.

Polypus mas, Seba, Thes. III, pl. 2, fig. 2, 3 (?), 1758.

Octopus, Barker, Phil. Trans., Vol. L, part 2, p. 777, pl. 29, fig. 1, 4, original figures from Edwards, 1758.

Octopus, Bruguière, Encycl. Meth., pl. 76, fig. 1, 2, 1783; figures copied from Seba.

Sepia rugosa, Bosc., Actes de la Soc. d'Hist. Nat., tab. 5, fig. 1-2, 1792.

Octopus granulatus, Lamareck, Mém. de la Soc. d'Hist. Nat. de Paris, t. I, p. 20, No. 2, 1799.

Sepia granulosa, Bosc., Buff. de Détéville Vers., t. I, p. 47, 1802.

Le Poulpe granuleux, Montfort, Buff. de Sonnini, Moll., t. III, p. 30, pl. 29, 1802; very bad copy; Bosc. figure.

Le Poulpe Americain, de Barker, Montfort, Buff. de Sonnini, Moll., t. III, p. 38, pl. 30 (figure copied from Barker, fig. 3); pl. 31, fig. 1 (copied from Barker, fig. 2, and copied from Seba, fig. 2.)

Octopus granulatus, Lam., Anim. s. Vert., t. VII, p. 658, 1822.

Octopus granulatus, Fer. d'Orb., Tableaux des Céphal., p. 53, No. 2, 1826.

Octopus granulatus, Blainville, Dict. des Sci. Nat., XLIII, p. 185, 1826.

Octopus Barkeri, Fer. d'Orb., Tab. des Céph., p. 54, No. 3, 1826.

Octopus rugosus, Blainville, Dict. des Sci. Nat., XLIII, p. 185, 1826.

Octopus americanus, Blainville, Dict. des Sci. Nat., XLIII, p. 189, 1826.

Octopus rugosus, d'Orbigny et Ferussac, Mem. des Céphal. Acét., p. 45, No. 9, Poulpes, pl. 6, figs. 1, 2. *O. granulatus*, pl. 23, fig. 20. *O. rugosus*, very poor figure of Bosc.

Octopus polyzenia, Gray, Ceph. Antep., Brit. Mus., p. 13, 1849.

Octopus incertus, Targ., Cef. Mus. Firenze, p. 22, tav. VI, figs. 9, 11, 1869.

Octopus polyzenia, E. A. Smith, "Alert" Report, p. 34, pl. 4, figs. A, A3, 1884.

Octopus granulatus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 8, 80, No. 6, 1886.

Octopus polyzenia, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 8, No. 9, 1886.

Habitat.—Port Essington, North Australia, Thursday Island, Torres Straits, 4 to 5 fathoms; Port Jackson (A.M.), Port Kembla, Broken Bay, Port Stephens, Newcastle, and the New South Wales coast in general. Moreton Bay, Queensland.

Octopus tetricus, Gould.

Octopus tetricus, Gould., Moll. Wilkes Exped., p. 474, fig. 588, 1852.

Octopus tetricus, Tryon, Manual of Conchology, Vol. 1, p. 121, pl. 35, figs. 46, 47.

Octopus tetricus, Hoyle, H.M.S. "Challenger," Report, 1886. Vol. XVI, pp. 8, 80, 82.

Habitat.—Found near Sydney, New South Wales. (Wilkes' Expedition.)

Octopus superciliosus, Quoy et Gaimard.

Octopus superciliosus, Quoy et Gaimard, Voy. "Astrolabe," t. II, p. 88, pl. 6, fig. 4, 1832.

Octopus Westernicnsis, Quoy, d'Orb., Céph. Acét., Poulpes, pl. X, fig. 3, 1838.

Octopus superciliosus, d'Orb., Céph. Acét., p. 41, pl. XXVIII, fig. 9.

Octopus superciliosus, Gray, Cat. Ceph. Antep., p. 12, No. 18, 1849.

Octopus superciliosus, Hoyle, Report on the Cephalopoda. H.M.S. "Challenger," Vol. XVI, p. 9, No. 16, 1886.

Habitat.—Western Port, Bass Strait, Victoria.

Octopus Australis, Hoyle.

Octopus australis, Hoyle, Diagnosis I, p. 224, 1885.

Octopus australis, Hoyle, Prelim. Rep. I, p. 98, 1885.

Octopus australis, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 9, 88, pl. 3, figs. 4, 5, 1886.

Habitat.—George's Beach, and 6 to 15 fathoms, Port Jackson, New South Wales. (A.M.)

Octopus tenebricus, E. A. Smith.

Octopus tenebricus, E. A. Smith, "Alert" Report, p. 35, pl. 4, fig. B, 1884.

Octopus tenebricus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 9, No. 22, 1886.

Habitat.—Port Denison, Queensland, 3 to 4 fathoms. (H.M.S. "Alert.")

Octopus duplex, Hoyle.

Octopus duplex, Hoyle, Diagnosis I, p. 226, 1885.

Octopus duplex, Hoyle, Prelim. Report, I, p. 101, 1885.

Octopus duplex, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 10, 90, pl. 7, fig. 5, 1886.

Habitat.—Off Twofold Bay, New South Wales, 150 fathoms. (H.M.S. "Challenger.")

Octopus pictus, Brock.

Octopus pictus, Brock., Zeitschr. f. wiss. Zool., Bd. XXXVI, p. 603, Taf. XXXVII, fig. 3, 1882—(non *Octopus pictus*, Verrill),

Octopus maculosus, Hoyle, Proc. Roy. Phys. Soc. Edin., Vol. VII, p. 319, pl. 6, 1883.

Octopus maculosus, E. A. Smith, "Alert" Report, p. 36, pl. 4, fig. C., 1884.

Octopus pictus, Brock., var. *fasciata*, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 10, 94, 1886.

Habitat.—Port Jackson, Port Stephens, New South Wales; Tasmania (A.M.); Kangaroo Island, South Australia; Moreton Bay, Queensland.

Octopus lunulatus, Quoy et Gaimard.

Octopus lunulatus, Quoy et G., Voy. "Astrolabe," t. II, p. 86, pl. 6, figs. 1, 2, 1832.

Octopus lunulatus, d'Orb., Céph. Acét., p. 59, Poulpes, pl. 10, fig. 2, pl. 26, figs. 5, 7, 1838.

Octopus lunulatus, Gray, Ceph. Antep., Brit. Mus., p. 11, 1849.

Octopus lunulatus, Tyron, Manual of Conchology, Vol. I, p. 121, pl. 26, figs. 15, 16, 1879.

Octopus lunulatus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 10, No. 36, 1886.

Habitat.—Torres Straits; Uji, Solomon Islands. (A.M.)

Octopus macropus, Risso.

Octopus macropus, Risso, Hist. Nat. Eur. Mérid., t. IV, p. 3, 1826.

Octopus Lechenaultii, d'Orb., Tab. des Poulpes, pl. I, 1825.

Octopus Cuvierii, d'Orb., Céph. Acét., Poulpes, pl. 4, 1826.

Octopus macropodus, Sangiovani, Ann. Sc. Nat., t. XVI, p. 319, 1829.

Octopus longimanus, Féruss, Poulpes, pl. 2, 1824.

Octopus Cuvierii, d'Orb., Céph. Acét., p. 18, Poulpes, pl. 4, 24, 1835.

Octopus macropus, Risso, d'Orb., Céph., Poulpes, pl. 24, 1835.

Octopus Cuvierii, Gray, Céph. Ante. Brit. Mus. Cat., p. 13, 1849.

Octopus macropus, Verany, Céph. Médit., p. 27, pl. X, 1851.

Octopus macropus, Targ., Céph. Mus. Firenze, p. 23, 1869.

Octopus Cuvierii, Targ., Ceph. Mus. Firenze, p. 24, 1869.

Octopus Cuvierii, Appellöf, Japanska Cep., p. 6, pl. 1, fig. 6, 1886.

Octopus macropus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 11, 95, 1886.

Habitat.—Port Jackson, New South Wales. (A.M.)

Octopus cyanea, Gray.

Octopus cyanea, Gray, Ceph. Antep., Brit. Mus. Cat., p. 15, 1849.

Octopus cyanea, Tryon, Manual of Conchology, Vol. I, p. 124, 1879.

Octopus cyanea, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 12, No. 53, 1886.

Habitat.—Port Jackson, New South Wales (A.M.); Moreton Bay, Queensland; Uji Island, Solomon Islands.

Octopus Peronii, Lesueur.

Sepia Octopoda, Peron, MSS.

Sepia Peronii, Lesueur, Journ. Acad. Nat. Sc., Philad., Vol. II, p. 101, 1821.

Octopus Peronii, Férus, d'Orb., Tab. Class. des Céph., 54, No. 7, 1823.

Octopus pustulosus, Peron, Blainv., Dict. Sc. Nat., XLIII, p. 186, 1826.

Octopus pustulosus, d'Orb., Céph. Acét., p. 66, 1835, 1848.

Octopus Peronii, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 13, No. 68, 1886.

Habitat.—Australian Seas. (Peron.)

Octopus cærulescens, Peron.

Octopus cærulescens, Peron, Blainv., Dic. des Sc. Nat., t. XLII, p. 129, 1826.

Octopus cærulescens, d'Orb., Céph. Acét., p. 65, 1835–48.

Octopus cærulescens, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 13, No. 73, 1886.

Habitat.—Australian Seas. (Peron.)

Octopus cornutus, Owen.

Tritæceopus cornutus, Owen, Trans. Zool. Soc., London, Vol. XI, part. 5, p. 131, pl. XXIII, 1881.

Octopus cornutus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 14, No. 78, 1886.

Habitat.—Australian Seas.

Octopus sp.

Octopus sp. Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 101, 1886.

Habitat.—Station 188, south of Papua, lat. $9^{\circ} 59' S.$, long. $139^{\circ} 42' E.$; 28 fathoms; green mud. (H.M.S. "Challenger.")

Octopus sp.

Octopus sp. Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 101, 1886.

Habitat.—Station 184, east of Cape York, lat. $12^{\circ} 8' S.$, long. $145^{\circ} 10' E.$; 1,400 fathoms; Globigerina ooze. (H.M.S. "Challenger.")

Sub-order DECAPODA, Leach.

DIVISION MYOPSIDA, d'Orbigny.

Family SEPIOLINI, Steenstrup.

SEPIOLA (Rondelet, 1554); Leach, 1817.

Sepiola Rondeletii, Leach.

De Sepiola, Rondelet, De Piscibus, lib. XVII, cap. X, p. 519, 1554.

Sepiola Rondeletii, Gesner, De Aquat., lib. IV, p. 855, 1558.

De Sepiola, Boussuet, De Nat. Aquat., p. 204, 1558.

Sepiola Rondeletii, Aldrovande, De Mollib., lib. V, p. 63, 1642.

Sepiola, Jonston, Hist. Nat. De Piscibus, lib. I, cap. III, t. I, p. 8, fig. 8, 1650.

Sepiola, Ruysch, Theatr. Evang., t. 1, fig. 1, 1718.

Sepia sepiola, Linn., Syst. Nat. edit. 12, p. 1,096, No. 5, 1767.

Sepia sepiola, Scopoli, Observ. Zool., p. 128, 1772.

Sepia sepiola, Herbst., Enseit. zur Kennt. der Gerv., p. 80, No. 4, 1788.

Sepia sepiola, Gmelin, Syst. Nat., ed. 13, p. 3,151, No. 5, 1789.

Loligo sepiola, Lamarek, Mémoires de la Société d'Hist. Nat. de Paris, p. 16, 1799.

Sepiola Rondeletii, Leach, Zool. Miscell., Vol. III, p. 138, 1817.

Loligo sepiola, Lamarek, Anim. sans. Vert., t. VII, p. 664, No. 4, 1822.

Sepiola vulgaris, Grant, Trans. Zool. Soc., Lond., Vol. I, p. 77, 1833.

Sepiola Rondeleti, d'Orb., Céph. Acét., p. 230; Sépioles, pl. 1, figs. 1, 6; pl. 2, figs. 3, 13; pl. 3, figs. 6, 9, 1835-48.

Sepiola Sepiola, Tryon, Manual of Conchology, Vol. I, p. 155, pl. 66, fig. 229, 1879.

Sepiola Rondeleti, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 101, 1886.

Habitat.—Iron Stone Cove, Port Jackson, N.S.W. (J. Brazier.)

INIOTEUTHIS, Verrill, 1881.

***Iniotenthis stenodactyla*, Grant.**

Sepiola stenodactyla, Grant, Trans. Zool. Soc., London, Vol. I, p. 84, pl. 11, figs. 1, 2, 1833.

Sepiola stenodactyla, Gervais et Van Beneden, Bull. de l'Acad. de Bruxelles, t. V, No. 7, from Grant.

Sepiola stenodactyla, d'Orb., Céph. Acét., p. 238, No. 5; Sépioles, pl. 2, figs. 1, 2, 6^e, 1835-48.

Sepiola stenodactyla, Gray, Ceph. Antep., Brit. Mus. Cat., p. 94, 1849.

Sepiola stenodactyla, Tryon, Manual Conchology, Vol. I, p. 157, pl. 66., fig. 239, 1879.

Sepiola stenodactyla, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 17, No. 5, 1886.

Habitat.—Port Jackson, New South Wales. (A.M.)

***Iniotenthis Tasmanica*, Pfeffer.**

Sepiola tasmanica, Pfeffer, Ceph. Hamb. Mus., p. 6, fig. 7, 1884.

Sepiola tasmanica, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Vol. XVI, p. 17, 1886.

Habitat.—Tasmania and Bass' Strait.

Family, SEPIARI, Steenstrup, 1861.

SEPIDÆ, d'Orb. (*Pars*).

Sub-family, SEPIADARI, Steenstrup, 1881.

SEPIOLOIDEA, d'Orbigny, 1839.

***Sepioloidea lineolata*, Quoy et Gaimard.**

Sepiola lineolata, Quoy et Gaim., Zool., Voy. "Astrolabe," Vol. II, p. 82, Moll., pl. 5, figs. 8, 13, 1832.

Sepiola lineolata, Gervais et Van Beneden, t. V, p. 6, No. 7, 1838.

Sepioloidea lineolata, d'Orb., Céph. Acét., p. 240 ; Sépioles, pl. 3, figs. 10, 18, 1839.

Sepiola lineata, Gray, Ceph. Antep. Brit. Mus., p. 95, 1849.

Sepiola lineolata, Tryon, Manual Conchology, Vol. I, p. 157, pl. 66, fig. 242 ; pl. 67, figs. 240, 241, 243, 1879.

Sepioloidea lineata, Stp., Sepiadarium og Idiosepius, p. 233, 1881.

Sepioloidea lineata, Brock, Zeitschi, f. Wiss. Zool., Bd. XL, pp. 105, 120, 1884.

Sepioloidea lineolata, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 19, No. 1, 1886.

Habitat.—Jervis Bay, Port Jackson, New South Wales (A.M.), Port Stephens ; St. Vincent Gulf, South Australia.

Sub-family, IDIOSEPII, Steenstrup, 1881.

SPIRULA, Lamarck, 1801.

Spirula Peroni, Lamarck.

Nautilus spirula, Linné, Syst. Nat., 12th edition, p. 1163, 1766.

Spirula fragilis, Lam., Syst. des Anim. sans Vert., p. 102, 1801.

Spirula prototypus, Peron, Voy. Terres Austral, pl. 30, fig. 4, 1804.

Spirula Australis, Lam., Ency. Meth., pl. 465, fig. 5, 1816.

Spirula fragilis, Schumacher, Nouv. Syst., p. 256, 1817.

Spirula peronii, Lam., Anim. sans Vert., Vol. 7, p. 601, 1822.

Spirula peronii, Lam., Anim. sans Vert., Desb. Edit., Vol. II, p. 280, 1845.

Spirula peronii, Owen in Ad. and Reeve, Voy. "Samarang," Moll. pl. 4, figs. 1, 4, 5, 6, 7, 11, 12, 13, 14, 15, 1884.

Lituus prototypus, Gray, Ceph. Antep. Brit. Mus., p. 115, 1849.

Lituus lævis, Gray, Ceph. Antep., Brit. Mus., p. 116, 1849.

Ammonia lævis, Angas, Proc. Zool. Soc., Lond., p. 157, 1865.

Ammonia (Lituus) lævis, Angas., Proc. Zool. Soc., Lond., p. 186, 1867.

Spirula peronii, Tryon, Manual of Conchology, Vol. I, p. 205, pl. 96, figs. 467, 469, 1879.

Spirula peronii, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI., pp. 20, 122, 1886.

Habitat.—New South Wales (A.M.), South Australia, Tasmania, Queensland, Torres Straits Islands, West and North-west Australia.

Sub-family EUSEPII, Steenstrup, 1881.

SEPIA, Linné, 1766.

***Sepia plangon*, Gray.**

Sepia plangon, Gray, Ceph. Antep. Brit. Mus., p. 104, 1849.

Sepia plangon, Tryon, Manual of Conchology, Vol. 1, p. 194, 1879.

Sepia plangon, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 21, 1886.

Habitat.—Port Jackson, and the coast of New South Wales. (A.M.)

***Sepia Smithi*, Hoyle.**

Sepia Smithi, Hoyle, Ann. and Mag. Nat. His., ser. 5, Vol. XVI, p. 190, 1885.

Sepia Smithi, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 21, 124, pl. 15, figs. 1, 12, 1886.

Habitat.—Arafura Sea, south of New Guinea; 28 fathoms; green mud. (H.M.S. "Challenger.")

***Sepia papuensis*, Hoyle.**

Sepia papuensis, Hoyle, Ann. and Mag. Nat. Hist., ser. 5, Vol. XVI, p. 197, 1885.

Sepia papuensis, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 21, 126, pl. 15, figs. 13, 23, 1886.

Habitat.—Arafura Sea, South of New Guinea; 28 fathoms; green mud. (H.M.S. "Challenger.")

***Sepia latimanus*, Quoy et Gaimard.**

Sepia latimanus, Quoy et Gaimard, Voyage "Astrolabe," Vol. 2, p. 68, pl. 1, Mollusca, figs. 2-11, 1832.

Sepia latimanus, d'Orb., Céph. Acét., n. 283; Seiches, pl. 12, figs. 1, 6, pl. 18, figs. 16, 17, 1839.

Sepia latimanus, Tryon, Manual of Conchology, Vol. I, p. 192, pl. 88, figs. 400, 401, 1879.

Sepia latimanus, Gray, Ceph. Antep., Brit. Mus., p. 101, 1849.

Habitat.—Western and North-west Australia; Torres Straits.

***Sepia apama*, Gray.**

Sepia apama, Gray, Ceph. Antep. Brit. Mus., p. 103, No. 10, 1849.

Sepia apama, Tryon, Manual of Conchology, Vol. I, p. 194, 1879.

Sepia apama, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 24, 1886.

Habitat.—Port Jackson, and the coast of New South Wales; South Australia. (A.M.)

***Sepia indica*, d'Orbigny.**

Sepia Blainvillei, d'Orb., Céph. Acét., pl. 21, 1839 (not Deshayes, 1837).

Sepia indica, d'Orb., Céph. Acét., p. 288, No. 21, 1839.

Sepia indica, Gray, Ceph. Antep., Brit. Mus., p. 108, 1849.

Sepia indica, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 22, 218, 220.

Habitat.—Western Australia, Cape Upstart, N.E. Australia.

***Sepia rostrata*, d'Orbigny.**

Sepia rostrata, d'Orb., Céph. Acét., p. 284; Seiches, pl. 8, fig. 6, pl. 26, 1839.

Sepia rostrata, Gray, Ceph. Antep., Brit. Mus., p. 108, 1849.

Acanthosepion spinigerum, Rochebr., Monogr. Sepiadae, p. 103, 1884.

Sepia rostrata, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 22, 218, 220.

Habitat.—Western Australia and Torres Straits.

***Sepia Australis*, d'Orbigny.**

Sepia Australis, d'Orb., Céph. Acét., p. 285; Seiches, pl. 7, fig. 4, 1839.

Sepia Australis, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 22, 220.

Habitat.—Kangaroo Island, South Australia.

***Sepia mestus*, Gray.**

Sepia mestus, Gray, Ceph. Antep. Brit. Mus., p. 108, 1849.

Sepia mestus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 23, 220, 1886.

Habitat, Port Jackson, and the Coast of New South Wales. (A.M.)

***Sepia cultrata*, Hoyle.**

Sepia cultrata, Stp., M.S. in Mus., Havn.

Sepia cultrata, Hoyle, Ann. and Mag. Nat. Hist, series 5, Vol. XVI, p. 198, 1885.

Sepia cultrata, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 133, 220, pl. 20, 1887.

Sepia capensis, Var. Gray, Ceph. Antep., Brit. Mus., p. 110 (*excl. syn.*)

Habitat.—Twofold Bay, New South Wales; 150 fathoms; green mud. (H.M.S. "Challenger.")

***Sepia elliptica*, Hoyle.**

Sepia elliptica, Hoyle, Ann. and Mag. Nat. Hist., series 5, Vol. XVI, p. 189, 1885.

Sepia elliptica, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 22, 131, 48; pl. 19, figs. 14, 24.

Habitat.—Arafura Sea, South of New Guinea; 28 and 49 fathoms; green mud. (H.M.S. "Challenger.")

***Sepia capensis*, d'Orbigny.**

Sepia capensis, d'Orb., Céph. Acét. Seiches, pl. 7, figs. 1-3, 1826.

Sepia Australis, Quoy et Gaimard, Voy. "Astrolabe," Vol. II, p. 7, pl. 5, figs. 3, 7, 1832,

Sepia capensis, d'Orb., Céph. Acét., p. 278; Seiches, pl. 7, figs. 1, 3, pl. 12, figs. 7, 11, pl. 17, figs. 18, 19, 1839.

Sepia Sinope, Gray, Ceph. Antep., Brit. Mus., p. 10, 1849.

Sepia capensis, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 23, 217.

Habitat.—New South Wales coast and North Queensland. (J. Brazier.)

***Sepia palmata*, Owen.**

Sepia palmata, Owen, Trans. Zool. Soc., London, Vol. II, part vi, page 134, pls. 22-25, 1881.

Sepia palmata, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 24, 220, 1886.

Habitat.—North Queensland Coast and Norfolk Island.

Sub-Genus **METASEPIA**, Hoyle, 1885.

***Sepia (Metasepia) Pfefferi*, Hoyle.**

Sepia (Metasepia) Pfefferi, Hoyle, Ann. and Mag. Nat. Hist., 5th series, Vol. XVI, pp. 199, 200, 1885.

Sepia (Metasepia) Pfefferi, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 24, 145, 218, pl. 21, figs. 1, 10.

Habitat.—Arafura Sea, South of New Guinea; 28 fathoms; green mud. (H.M.S. "Challenger.")

Family **LOLIGINÆ**, Steenstrup, 1861.

SEPIOTEUTHIS, Blainville, 1825.

***Sepioteuthis lunulata*, Quoy et Gaimard.**

Sepioteuthis lunulata, Quoy et Gaim., Voy. "Astrolabe," Vol. II, p. 74, Moll., pl. 3, figs. 3, 13, 1832.

Sepioteuthis Guinensis, Quoy et Gaim., Voy. "Astrolabe," Vol. II, p. 72, pl. 3, figs. 1, 7, 1832.

Sepioteuthis lunulata, d'Orb., Céph. Acét., p. 300, Sépioteuthis, pl. 3, fig. 1. pl. 6, figs. 1, 8, 1839.

Sepioteuthis dorensis, d'Orb., Céph. Acét. Sépioteuthis, pl. 3, fig. 3. 1833.

Sepioteuthis lunulata, Gray, Ceph. Antep., Brit. Mus., p. 78, 1849.

Sepioteuthis Guinensis, Tryon, Manual of Conchology, Vol. 1, p. 151, pl. 61, fig. 198, 1879.

Sepioteuthis lunulata, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 27, 220.

Habitat.—Port Jackson, New South Wales; Torres Straits; New Guinea; Bougainville Island; Solomon Islands. (A.M.)

***Sepioteuthis Australis*, Quoy et Gaimard.**

Sepioteuthis Australis, Quoy et Gaim., Voy. "Astrolabe," Vol. II, p. 77, pl. 4, fig. 1, 1832.

Sepiothuthis Australis, d'Orb., Céph. Acét., p. 300; Sépioteuthis, pl. 5, fig. 5, pl. 6, figs. 15, 21, 1839.

Sepiothuthis Australis, Gray, Ceph. Antep., Brit. Mus., p. 79, 1849.

Sepiothuthis Australis, McCoy, Nat. Hist., Victoria, Decade 7, pl. 61, 62, 1883.

Sepiothuthis Australis, Tryon, Manual of Conchology, Vol. I, p. 151, pl. 61, fig. 201, 1879.

Sepioteuthis australis, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 26, 220.

Habitat.—Western Port, Victoria; Port Jackson, New South Wales (A.M.); Darnley Island, Torres Straits.

***Sepioteuthis Lessoniana*, Férussac.**

Sepioteuthis Lessoniana, d'Orb., Tab. Méth. Ann. de. Sci. Nat., Vol. VII, p. 155, 1826.

Sepioteuthis Lessoniana, Lesson, Voy. "Coquille," Moll., p. 241, pl. 11, 1830.

Sepioteuthis Lessoniana, d'Orb., Céph. Acét., p. 302; Sépioteuthis, pls. 1, 6, figs. 9, 14, 1839.

Sepioteuthis Lessoniana, Gray, Ceph. Antep., Brit. Mus., p. 80, 1849.

Sepioteuthis Lessoniana, Tryon, Manual of Conchology, Vol. I, p. 152, pl. 62, fig. 212, 1879.

Sepioteuthis lessoniana, Hutton, New Zealand, Mollusca, p. 3, 1880.

Sepioteuthis lessoniana, Appellöf, Japanska, Ceph., p. 31, 1886.

Sepioteuthis lessoniana, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 27, 219, 220.

Habitat.—Frazer's Island, Queensland; New Zealand; Uji Island, Solomon Islands (A.M.); Torres Straits; New Guinea.

***Sepioteuthis mauritiana*, Quoy et Gaimard.**

Sepioteuthis mauritiana, Quoy et Gaim., Voy. "Astrolabe," Vol. II, p. 76, pl. 4, figs. 2, 6, 1832.

Sepioteuthis mauritiana, d'Orb., Céph. Acét., p. 304; Sépioteuthis, pl. 5, figs. 1, 4; pl. 7, figs. 1-5, 1839.

Sepioteuthis mauritiana, Gray, Ceph. Antep., p. 79, 1849.

Sepioteuthis mauritiana, Tryon, Manual of Conchology, Vol. I, p. 152, pl. 62, fig. 206, 1879.

Sepioteuthis mauritiana, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 27, 217.

Habitat.—Port Jackson, New South Wales. J. Brazier (A.M.)

***Sepioteuthis bilineata*, Quoy et Gaimard.**

Sepia bilineata, Quay et Gaim., Voyage. "Astrolabe," Vol. II, p. 66, pl. 2, fig. 1, 1832.

Sepioteuthis bilineata, d'Orb., Céph. Acét., p. 301; Sépioteuthis, pl. 4, fig. 2, 1839.

Sepioteuthis bilineata, Gray, Ceph. Antep., Brit. Mus., p. 82, 1849.

Sepioteuthis bilineata, Tryon, Manual of Conchology, Vol. I, p. 154, pl. 63, fig. 221, 1879.

Sepioteuthis bilineata, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 27.

Habitat.—Western Port, Victoria; Bass Straits.

***LOLIGO*, Lamarek, 1799.**

***Loligo australis*, Gray.**

Loligo australis, Gray, Ceph., Antep., Brit. Mus., p. 71, 1849.

Loligo australis, Tryon, Manual of Conchology, Vol. I, p. 148, 1879.

Loligo australis, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 31, 220.

Habitat.—Port Jackson, Newcastle, Port Stephens, New South Wales (A.M.)

Loligo edulis, Hoyle.

Loligo edulis, Hoyle, Ann. and Mag. Nat. Hist., 5th. series, Vol. XVI, p. 186, 1885.

Loligo edulis, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 29, 152, pl. 23, 1886.

Habitat.—Port Jackson, New South Wales; Yokohama, Japan. (A.M.).

Loligo indica, Pfeffer.

Loligo indica, Pfeffer, Cephalopoda, Hamb. Mus., p. 4, fig. 3, 3^a, 1884.

Loligo indica, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 29, 156, pl. 26, 1886.

Habitat.—Arafura Sea, south of New Guinea; 28, 49 fathoms; green mud. (H.M.S. "Challenger.")

Division CEGOPSIDA, d'Orbigny, 1839.**Family OMMASTREPHINI**, Steenstrup, 1861.

Sub-family OMMASTREPHIDÆ, Gill, 1871.

OMMASTREPHESES, d'Orbigny, 1835.

Ommastrephes gigas, d'Orbigny.

Pernetti, Hist. Voy. aux Malouines, Vol. II, p. 76? 1770.

Sepia tunicata, Molina, Hist. Nat. du Chili, p. 173? 1789.

Sepia tunicata, Gmelin, Syst. Nat., ed. 13, p. 3151, sp. 8? 1789.

Sepia nigra, Bosc, Hist. Nat. des Vers, Vol. I, p. 47? 1802.

Ommastrephes gigas, d'Orb., Voy. dans l'Amér. Mér., p. 50, pl. 4, 1835.

Ommastrephes giganteus, d'Orb., Céph. Acét., p. 350, 1839.

Ommastrephes gigas, Tryon, Manual of Conchology, Vol. I, p. 179, pl. 80, figs. 357, 360, 1879.

Ommastrephes gigas, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 32, 214, 1886.

Habitat.—North Queensland Coast; New South Wales; Lord Howe Island. (A.M.)

Ommastrephes oualaniensis, Lesson.

Loligo oualaniensis, Lesson, Voy. de "Coquille," Zool., p. 240, pl. 1, fig. 2, 1830.

Loligo vanikoriensis, Quoy et Gaim., Voy. "Astrolabe," Vol. II, p. 79, pl. 5, figs. 1, 2, 1832.

Loligo brevitentaculata, Quoy et Gaim., Voy. "Astrolabe," Vol. II, p. 81, 1832.
Ommastrephes oualaniensis, d'Orb., Céph. Acét., p. 341; Calamars, pl. 3,
 pl. 21, figs. 1, 2, 1839.

Ommastrephes oualaniensis, Stp., Ammot. Blækspr, pp. 76, 84, 1880.

Ommastrephes oualaniensis, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 33, 161, 214, 1886.

Habitat.—Torres Straits, Great Barrier Reef, Nickol Bay, North-West Australia. (J. Brazier.)

Ommastrephes Gouldi, McCoy.

Ommastrephes Gouldi, McCoy, Prodromus of the Zoology of Victoria, Decade, XVII, Vol. II., p. 255, pl. 169, 170, 1888.

Habitat.—Victorian Waters, South Coast of Australia. (Professor McCoy.)

Family ONCHIL, Steenstrup, 1861.

Sub-family ONYCHOTEUTHIDÆ, Gray, 1849.

ONYCHOTEUTHIS, Lichtenstein, 1818.

Onychoteuthis rutilus, Gould.

Onychoteuthis rutilus, Gld., Moll., Wilkes' Exped., p. 482, fig. 595, 1852.

Onychoteuthis rutilus, Tryon, Manual of Conchology, Vol. I, p. 169, pl. 7,
 fig. 302, 1879.

Onychoteuthis rutilus, Hoyle, Report on Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 39, 1886.

Habitat.—Near Sydney, New South Wales. (Wilkes' Expedition.)

Family CRANCHIÆFORMES, Steenstrup, 1861.

Sub-family CRANCHIADÆ, Gray, 1849.

TAONIUS, Steenstrup, 1861.

Taonius Suhmi, Lankester.

Procalistes suhmii, Lankester, Quart. Jour. Micr. Sci., Vol. XXIV, p. 311, 1884.

Taonius suhmii, Hoyle, in Narrative, "Challenger" Expedition, p. 472, figs. 173, 174, 1885.

Taonius suhmii, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, pp. 45, 199, pl. 32, figs. 5-11, 1886.

Habitat.—Station 159; Southern Ocean due south of Australia, lat. 47° 25' S., long 130° 22' E.; 2,150 fathoms. Between Sydney and Wellington, surface specimens (H.M.S. "Challenger").

Order TETRABRANCHIATA, Owen, 1832.

Family NAUTILIDÆ, Owen, 1836.

NAUTILUS, Linné, 1757.

Nautilus pompilius, Linné.

Nautilus pompilius, Linn., Syst. Nat., ed. X, p. 708, No. 283, 232, 1758.

Nautilus major crassus, Martini, Conch. Cab., Vol. I, p. 226, Vignette 10, pl. 18, fig. 164; pl. 19, figs. 165, 166, 1769.

Nautilus pompilius, Gmelin, Syst. Nat., Vol. I, part VI, p. 3,369, No. 1, 1791.

Nautilus pompilius, Lamarck, Anim. sans. Vert., Vol. VII, p. 632, 1822.

Nautilus pompilius, Burrow, Elements of Conchology, pl. 12, fig. 2, 1825.

Nautilus pompilius, Menke, Moll., Novæ Hollandiæ, p. 5, No. 2, 1843.

Nautilus pompilius, Sowerby, Thes. Conch., Vol. II, p. 463, pl. 97, fig. 1, pl. 98, fig. 6, 1848.

Nautilus pompilius, Hanley, Ipsa Linnæi Conchyliæ, p. 155, 1855.

Nautilus pompilius, Wood, Index. Test., ed. Hanley, p. 73, pl. 3, fig. 11, 1856.

Nautilus pompilius, Reeve, Conch. Icon., Vol. XII, pl. 1, 2, 1861.

Nautilus pompilius, Kuster, Conch. Cab., sec. 55, p. 9, pl. 2, fig. 2, 1868.

Nautilus pompilius, Angas, Proc. Zool. Soc., p. 178, No. 1, 1877.

Nautilus pompilius, Brazier, "Chevert" Exped., & Shells, Proc. Linn. Soc., New South Wales, Vol. II, p. 143, No. 1, 1877-1878.

Nautilus pompilius, Tryon, Manual of Conchology, Vol. I, p. 2, pl. 99, figs. 507, 508, 1879.

Nautilus pompilius, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger" Zoology, Vol. XVI, pp. 47-199, No. 1, 1886.

Habitat.—Warrior Island, Torres Straits; cast ashore at the Bellinger River, and Coff's Harbour, New South Wales, Coogee Bay, south of Sydney, cast ashore after the great easterly gale of 1857. (J. Brazier.)

Nautilus ambiguus, Sowerby.

Nautilus ambiguus, Sowerby, Thes. Conch., Vol. II, p. 464, pl. 97, fig. 2, 1848.

Nautilus pompilius, Reeve (non Linné) Conch. Icon., Vol. XII, species 1, 1861.

Nautilus ambiguus, Brazier, "Chevert" Exped. Shells, Proc. Linn. Soc., New South Wales, Vol. II, p. 143, No. 2, 1877-1878.

Nautilus pompilius, Tryon, Manual of Conchology, Vol. I, index, p. 271, 1879.

Habitat.—Cape Grenville, North Queensland, cast ashore on the beaches in vast numbers. (J. Brazier.) This species is thicker, wider at the aperture, nearly all white, with very few reddish-brown radiating stripes, and more depressed round where the umbilicus should be than in typical *Nautilus pompilius*, Linné.

***Nautilus stenomphalus*, Sowerby.**

Nautilus stenomphalus, Sowerby, Thes. Conch., Vol. II, p. 465, pl. 97, fig. 3, 1848.

Nautilus stenomphalus, Reeve, Conch. Icon., Vol. XII, pl. 5, fig. 4, 1861.

Nautilus stenomphalus, Kuster, Conch. Cab., sec 55, p. 11, pl. 3b, 1868.

Nautilus stenomphalus, Brazier, "Chevert" Exped. Shells, Proc. Linn. Soc., New South Wales, Vol. II, p. 144, No. 3, 1877–1878,

Nautilus stenomphalus, Tryon, Manual of Conchology, Vol. II, p. 216, pl. 99, fig. 509, 1879.

Nautilus stenomphalus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 47, No. 5, 1886.

Habitat.—Darnley Island, Torres Straits. (J. Brazier.)

***Nautilus macromphalus*, Sowerby.**

Nautilus macromphalus, Sowerby, Thes. Conch., Vol. II, p. 464, pl. 98, figs. 4, 5, 1848.

Nautilus macromphalus, Reeve, Conch. Icon., Vol. XII, pl. 6, fig. 5, 1861.

Nautilus macromphalus, Kuster, Conch. Cab., sec. 55, p. 10, pl. 3a, 1868.

Nautilus macromphalus, Angas, Proc. Zool. Soc., p. 178, 1877.

Nautilus macromphalus, Tryon, Manual of Conchology, Vol. 1, p. 216, pl. 99, fig. 510, 1879.

Nautilus macromphalus, Hoyle, Report on the Cephalopoda, H.M.S. "Challenger," Zoology, Vol. XVI, p. 47, No. 3, 1886.

Habitat.—Cast ashore at the Bellinger River and Coff's Harbour, New South Wales, after easterly gales. (J. Brazier, 1870.)

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(CATALOGUE No. 15.)

CATALOGUE

OF THE

MARINE SHELLS OF AUSTRALIA AND TASMANIA.

PART II.

PTEROPODA.

BY

JOHN BRAZIER, C.M.Z.S., F.L.S.

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THIS portion of the Catalogue contains the Pteropoda (Hyalæa) Families, Limacinidæ, Cavoliniidæ, Notobranchæidæ, and Clionidæ.

The exact habitats are given of those species found by the compiler on the beaches and obtained in the towing net off the New South Wales coast, Torres Straits, and Northern Territory.

It does not appear that any species have ever been recorded from Tasmania, South or Western Australia.

J. BRAZIER.

PTEROPODA.

Order I.—THECOSOMATA.

Family I.—LIMACINIDÆ.

Limacina inflata, d'Orbigny.

Atlanta inflata, d'Orbigny, Voyage dans l'Amérique, Vol. V, p. 174, pl. 12, figs. 16, 19, 1836.

Spirialis rostralis, Eydoux et Souleyet, Description sommaire de plusieurs Ptéropodes nouveaux ou imparfaitement connus, Revue Zoologique, Vol. III, p. 236, 1840.

Limacina inflata, Gray Catalogue of the Mollusca in the British Museum, part ii, Pteropoda, p. 31, 1850.

Spirialis rostralis, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 216, pl. 13, figs. 1, 10, 1852.

Limacina scaphoidea, Gould, The Mollusca and Shells of the United States, Exploring Expedition, p. 485, pl. 51, fig. 602, 1852.

Protomedea elata, O. G. Costa, Microdoride mediterranea, p. 74, pl. 11, fig. 5, 1861.

Embolus rostralis, Jeffreys, Mediterranean Mollusca, Ann. and Mag. Nat. Hist., ser. 4, Vol. VI, p. 86.

Protomedea rostralis, Fischer, Sur la faune Malacologique abyssale de la Méditerranée, Comptes rendus, T. XCIV, p. 120, 1882.

Limacina inflata, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, p. 16, 1888.

Limacina inflata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 769, 1889.

Habitat.—Between Sydney and Melbourne. (H.M.S. "Challenger"). Broken Bay, Port Stephens, Coogee Bay, New South Wales; found in shell sand. (J. Brazier.)

Limacina Lesueuri, d'Orbigny.

Atlanta Lesueuri, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 177, pl. 20, figs. 12, 15, 1836.

Atlanta Rangii, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 176, pl. 12, figs. 25, 28, 1836.

Spirialis ventricosa, Eydoux et Souleyet, Description sommaire de plusieurs Ptéropodes nouveaux au imparfaitement connus, Revue Zoologique, Vol. III, p. 236, 1840.

Limacina ventricosa, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 32, 1850.

Spirialis ventricosa, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 218, pl. 13, figs. 11, 16, 1852.

Spirialis ventricosa, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 63, pl. 14, figs. 13, 18, 1852.

Limacina Lesueurii, Boas, Spolia Atlantica, p. 46, pl. 3, figs. 33, 34, 1886.

Limacina lesueurii, Pelseneer, Report on the Pteropoda, II.M.S. "Challenger," Zoology, Vol. XXIII, p. 24, 1888.

Limacina Lesueurii, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 770, 1889.

Habitat.—Between Sydney and Melbourne. (H.M.S. "Challenger"). Broken Bay, Port Stephens, New South Wales; in shell sand. (J. Brazier.)

***Limacina trochiformis*, d'Orbigny.**

Atlanta trochiformis, d'Orbigny, Voyage dans l'Amérique méridionale. Vol. V, p. 177, pl. 12, figs. 29, 31, 1836.

Spirialis trochiformis, Eydoux et Souleyet, Description sommaire de quelques Ptéropodes nouveaux ou imparfaitement connus, Revue Zoologique, Vol. III, p. 237, 1840.

Limacina trochiformis, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 33, 1850.

Limacina naticoides, Rang, Hist. Nat. des Moll., Ptéropodes, pl. 10, fig. 1-2, 1852.

Spirialis trochiformis, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 223, pl. 13, figs. 27, 34, 1852.

Spirialis trochiformis, Rang et Souleyet, Hist. Nat. des Moll., Pteropodes, p. 64, pl. 14, fig. 27-31.

Limacina trochiformis, Boas, Spolia Atlantica, p. 45, 1886.

Limacina trochiformis, Pelseneer, Report on the Pteropoda of II.M.S. "Challenger," Zoology, Vol. XXIII, p. 29, 1888.

Limacina trochiformis, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 771, 1889.

Habitat.—Between Melbourne and Sydney. (H.M.S. "Challenger"). Broken Bay, Port Stephens, Coojee Bay, New South Wales; found in shell sand. (J. Brazier.)

***Limacina bulimoides*, d'Orbigny.**

Atlanta bulimoides, d'Orbigny, Voyage dans l'Amérique méridionale. Vol. V. p. 179, pl. 12, figs. 36, 38, 1836.

Spiralis bulimoides, Eydoux et Souleyet, Revue Zoologique, Vol. III, p. 238, 1840.

Limacina bulimoides, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 34, 1850.

Spiralis bulimoides, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 224, pl. 13, figs. 35, 42, 1852.

Spiralis bulimoides, Rang et Souleyet, Hist. Nat. des. Moll., Ptéropodes, p. 65, pl. 15, figs. 1, 5, 1852.

Heterofusus bulimoides, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 99, 1877.

Limacina bulimoides, Boas, Spolia Atlantica, p. 47, pl. 3, figs. 36, 37, 1886.

Limacina bulimoides, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 31, 1888.

Limacina bulimoides, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 772, 1889.

Habitat.—Broken Bay, Port Stephens, Botany Bay, New South Wales; found in shell sand on beaches. (J. Brazier.) Between Melbourne and Sydney in towing net. (H.M.S. "Challenger.")

Family II.—CAVOLINIIDÆ.

***Clio (Creseis) virgula*, Rang,**

Creseis virgula, Rang, Notice sur quelques Mollusques nouveaux du genre Cleodora, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 316, pl. 17, fig. 2, 1828.

Creseis unguis, Eschscholtz, Zoologischer Atlas, Heft. III, p. 17, pl. 15, fig. 4, 1829.

- Creseis cornucopiæ*, Eschscholtz, Zoologischer Atlas, Heft III, p. 17, pl. 15, fig. 5, 1829.
- Creseis caligula*, Eschscholtz, Zoologischer Atlas, Heft III, p. 18, pl. 15, fig. 6, 1829.
- Hyalæa corniformis*, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 120, pl. 8, figs. 20, 23, 1836.
- Styliola virgula*, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 17, 1850.
- Styliola corniformis*, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 17, 1850.
- Cleodora virgula*, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 196, pl. 8, figs. 18, 25, 1852.
- Cleodora munda*, Gould, Mollusca and Shells of the United States Exploring Expedition, p. 489, pl. 51, fig. 607, 1852.
- Cleodora placida*, Gould, Mollusca and Shells of the United States Exploring Expedition, p. 489, pl. 51, fig. 606, 1852.
- Cleodora falcata*, Gould, Mollusca and Shells of the United States Exploring Expedition, p. 490, pl. 51, fig. 608, 1852.
- Creseis virgula*, Sowerby, in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 5, fig. 32, 1877.
- Cleodora flexa*, Pfeffer, Akad. d. Wiss. Berlin, p. 241, figs. 15, 16, 1879.
- Creseis virgula*, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, figs. 39, 40, 1884.
- Cleodora virgula*, Boas, Spolia Atlantica, pp. 57, 210, pl. 5, fig. 71; pl. 6, fig. 94, 1886.
- Clio (Creseis) virgula*, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, p. 48, 1888.
- Clio (Creseis) virgula*, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, 773, 1889.
- Habitat*.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; in shell sand after gales. (J. Brazier.) Off Sydney Heads in towing net; between Melbourne and Sydney. (H.M.S. "Challenger.")

Clio (Creseis) acicula, Rang.

Creseis acicula, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 318, pl. 17, fig. 6, 1828.

Creseis clava, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 317, pl. 17, fig. 5, 1828.

Creseis acus, Eschscholtz, Zoologischer Atlas, Heft. III, p. 17, pl. 15, fig. 2, 1829.

Hyalæa aciculata, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 123, pl. 8, figs. 29, 31, 1836.

Styliola recta, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 18, 1850.

Cleodora acicula, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 104, pl. 8, figs. 10, 17, 1852.

Cleodora acicula, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 56 pl. 6, fig. 7 and 5, 1852.

Creseis aciculata, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 5, fig. 29, 1877.

Creseis aciculata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, fig. 45, 46 1884.

Cleodora acicula, Boas, Spolia Atlantica, p. 59, pl. 6, fig. 94, 1886.

Clio (Creseis) acicula, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, p. 48, 1888,

Clio (Creseis) acicula, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, 774, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; in shell sand after gales. (J. Brazier.) Off Sydney Heads in towing net; Torres Straits. (H.M.S. "Challenger.")

Clio (Hyalocylix) striata, Rang.

Creseis striata, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 315, pl. 15, fig. 7, 1828.

Creseis compressa, Eschscholtz, Zoologischer Atlas, Heft. III, p. 17, pl. 15, fig. 7, 1829.

Creseis zonata, Delle Chiaje, Memorie sulla storia e notomia degli animali senza vertebre, pl. 82, fig. 9, 1830.

- Styliola striata*, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 18, 1850.
- Cleodora striata*, Rang et Souleyet, Hist. Nat. des. Moll., Ptéropodes, p. 55 pl. 6. fig. 3, 1852.
- Cleodora striata*, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 191, pl. 8, figs. 1, 4, 1852.
- Creseis phæostoma*, Troschel, Archiv f. Naturgesch., p. 206, pl. 8, figs. 5, 7, 1854.
- Creseis striata*, Sowerby in Reeve, Conch. Icon., Vol. XX, pl. 5, Pteropoda, fig. 30,^{a,b} 1877.
- Creseis striata*, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, fig. 38, 1884.
- Cleodora striata*, Boas, Spolia Atlantica, pp. 62, 202, 1886.
- Clio* (*Hyalocylix*) *striata*, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 54, pl. 2, fig. 3, 1888.
- Clio* (*Hyalocylix*) *striata*, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 775, 1889.
- Habitat*.—Cabbage-tree Bay or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; in shell sand after gales; Torres Straits; Port Darwin. (J. Brazier.) Raine Island, near Torres Straits; 135 fathoms. (H.M.S. "Challenger.")

***Clio* (*Styliola*) *subula*, Quoy and Gaimard.**

- Styliola recta*, Lesueur, in de Blainville, Manuel de Malacologie, p. 655, 1825.
- Cleodora subula*, Quoy et Gaimard, Observations Zoologiques faites à bord de "l'Astrolabe," Ann. d. Sci. Nat., sér. 1, Vol. X, p. 223, pl. 8, D. figs. 1, 3, 1827.
- Creseis spinifera*, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 313, pl. 17, fig. 1, 1828.
- Creseis subula*, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XXIII, p. 313, pl. 17, fig. 1, 1828.
- Hyalæa subula*, d'Orbigny, Voyage dans l'Amérique, Vol. V, p. 119, pl. 8, figs. 15, 19, 1836.
- Styliola subula*, Gray, Catalogue of the Mollusca in the British Museum, part II., Pteropoda, p. 17, 1850.
- Cleodora subulata*, Rang et Souleyet, Hist. Nat. des. Moll., Ptéropodes, p. 55. pl. 6, fig. 1, 1852.

Cleodora subulata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 192, pl. 8, figs. 5, 9, 1852.

Styliola subulata, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc. London, p. 178, 1877.

Crescis spinifera, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 5, fig. 33, 1877.

Crescis spinifera, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, figs. 43, 44, 1884.

Cleodora sulu'a, Boas, Spolia Atlantica, pp. 65, 202, pl. 1, figs. 44, 45, 1886.

Clio (Styliola) subula, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 57, 1888,

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, Bellinger River, New South Wales; in shell sand after gales; Port Darwin. (J. Brazier.) Off Sydney and Melbourne, in towing net; Raine Island, near Torres Straits. (H.M.S. "Challenger,")

Clio pyramidata, Linné.

Clio pyramidata, Linné, Systema Naturæ, ed. 12, p. 1094, 1767.

Hyalæa lanceolata, Lesueur, Mémoire sur quelques espèces d'animaux mollusques et radiaires recueillis dans la Méditerranée près de Nice, Nouv. Bull. Soc., Philom.; Paris, Vol. III, p. 284, pl. 5, fig. 3, 1813.

Cleodora Brownii, De Blainville, Manuel de Malacologie, pl. XLVI, fig. 1, 1825.

Hyalæa pyramidata, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 113, pl. 7, figs. 25, 29, 1836.

Cleodora Lamartinieri, Rang, in d'Orbigny, Mollusques de Cuba, p. 83, 1841.

Clio pyramidata, Gray, Catalogue of the Mollusca in the British Museum, part II., Pteropoda, p. 12, 1850.

Cleodora lanceolata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. V, p. 179, pl. 6, figs. 17, 25, 1852.

Cleodora pyramidata, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 50, pl. 5, fig. 11, figs. 7, 10, 1852.

Cleodora exacuta, Gould, The Mollusca and Shells of the U.S. Exploring Expedition, p. 488, pl. 51, fig. 605, 1852.

Cleodora lobata, Sowerby, in Reeve, Conch. Icon., Vol. XX, Pteropoda, fig. 26, 1877.

Cleodora martensii, Pfeffer, Du Pteropoden des Hamburger Museums, Abhandl. d. Naturw. Ver. Hamburg, Bd. VII, p. 95, pl. 7, fig. 16, 1880.

Cleodora pyramidata, Boas, Spolia Atlantica, p. 69, pl. C, figs. 96-97, 1886.

Cliopyramidata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Vol. XXIII, p. 63, 1888.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach; Port Stephens, Broken Bay, New South Wales; in shell sand after gales. (J. Brazier.) Off Sydney Heads, 950 fathoms, bottom green mud; off Melbourne, in towing net; Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cuvierina columnella, Rang.

Cleodora obtusa, Quoy et Gaimard, Voyage de l' "Uranie," Zoologie, p. 415, pl. 66, fig. 5, 1824.

Cuvieria columnella, Rang, Ann. des Sc. Nat., Vol. XII, p. 323, pl. 45, figs. 1, 8, 1827.

Cuvieria oryza, Benson, Corrected characters of the genus Cuvieria and notice of a second species inhabiting the tropical Indian Ocean, Journal Asiat., Soc. Bengal, Vol. IV, p. 698, 1835.

Triptera columnella, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 23, 1850.

Cuvieria urceolaris, Mörch, Catalogus conchyliorum quae reliquit, C. P. Kjerulf, p. 32, 1850.

Cuvieria columnella, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 205, pl. 12, figs. 1, 11, 1852.

Cuvieria columnella, Rang et Souleyet, Hist. Nat. des Moll. Ptéropodes, p. 59, pl. 4, pl. 14, figs. 1, 6, 1852.

Triptera columnella, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 179, 1877.

Triptera columnella, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda pl. 5, fig. 27, 1877.

Triptera columnella, Pfeffer, Monatsber. d. k. preuss. Akad. d. Wiss., Berlin, p. 243, fig. 18, 1879.

Triptera cancellata, Pfeffer, Monatsber. d. k. preuss. Akad. d. Wiss., p. 243, fig. 19, 1879.

Triptera columnella, Sowerby, Thes. Conch., Vol. V, p. 145, Pteropoda, pl. 2, fig. 49, 1884.

Cuvierina columnella, Boas, Spolia Atlantica, pp. 131, 133, pl. 3, fig. 39, pl. 6, fig. 95, 1886.

Cuvierina columnella, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 67, 1888.

Cuvierina columnella, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 778, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach; Port Stephens, Broken Bay, New South Wales. (A.M.) In shell sand on the beaches after gales. Off Sydney Heads, in towing net; Port Darwin. (J. Brazier.) (A.M.) Raine Island, near Torres Straits. (H.M.S. "Challenger.")

***Cavolinia trispinosa*, Lesueur.**

Anomia aculeata major, Chemnitz, Conch. Cab., Vol. VIII, Vignette, plate 13, p. 65, letter a, b, pp. 71, 92, 1785.

Anomia aculeata maxima, Chemnitz, Conch. Cab., Vol. VIII, Vignette, plate 13, p. 65, letters c, d, pp. 71, 93, 1785.

Hyalæa trispinosa, Lesueur, MS. in de Blainville, Hyale, Diet. d. Sci. Nat., Vol. XXII, p. 82, 1821.

Hyalæa mucronata, Quoy et Gaimard, Observations Zoologiques faites à bord de l' "Astrolabe," Ann. d. Sci. Nat., sér. 1, Vol. X, p. 231, pl. 8B, figs. 1, 2, 1827.

Hyalæa depressa, Bivona, Descrizione di una nuova specie di Jale, Efemeridi scientifiche e litterarie per la Sicilia, p. 57, pl. 1, figs. 4, 5, 1832.

Hyalæa cuspidata, Delle Chiaje, Descrizione notomia degli animali senza vertebre del Regno di Napoli, pl. 180, figs. 1, 2 (*non* d'Orbigny), 1841.

Diacria trispinosa, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 10, 1850.

Diacria mucronata, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 11, 1850.

Hyalæa trispinosa, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 161, pl. 6, figures 1, 10, 1862.

Hyalæa trispinosa, Rang et Souleyet, Hist. Nat. des Moll. Ptéropodes, p. 45, pl. 3, figs. 1, 7, 1852.

Hyalæa Reevidana, Dunker, Index Molluscorum, p. 2, pl. 1, figs. 17, 20, 1853.

Pleuropus trispinosus, H. and A. Adams, Genera of Recent Mollusca, Vol. II, p. 611, 1858.

Pleuropus mucronatus, H. and A. Adams, Genera of Recent Mollusca, Vol. II, p. 611, 1858.

- Diacria mucronata*, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 178, 1877.
- Hyalæa* (*Diacria*) *trispinosa*, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 15, 1877.
- Hyalæa* (*Diacria*) *mucronata*, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 16, 1877.
- Hyalæa* (*Diacria*) *trispinosa*, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 20, 1884.
- Hyalæa* (*Diacria*) *mucronata*, Sowerby, Thes. Conch., Vol. V, p. 142, Pteropoda, pl. 1, figs. 27, 28, 1884.
- Hyalæa trispinosa*, Boas, Spolia Atlantica, p. 94, pl. 1, fig. 3; pl. 2, fig. 14, 1886.
- Hyalæa trispinosa*, Sowerby, Illustrated Index of British Shells, second edition, pl. 10, fig. 1, 1887.
- Carolonia trispinosa*, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, pp. 76, 77, 1888.
- Carolonia trispinosa*, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 779, 1889.
- Habitat*.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales, off Sydney Heads and Bondi Bay in towing net; Torres Straits and inside the Great Barrier Reef in towing net; Port Darwin, in beach sand. (J. Brazier). Off Sydney, 950 fathoms, bottom green sand. (H.M.S. "Challenger.")

***Cavolinia quadridentata*, Lesueur.**

- Hyalæa quadridentata*, Lesueur, MS., in Blainville, Hyale, Dict. d. Sci. Nat. Vol. XXII, p. 81, 1821.
- Hyalæa quadrispinosa*, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 85, 1836.
- Carolina quadridentata*, Gray, Catalogue of the Mollusca in the British Museum, part II., Pteropoda, p. 8, 1850.
- Hyalæa quadridentata*, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 147, pl. 4, figs. 25, 32, 1852.
- Hyalæa quadridentata*, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 39, pl. 3, figs. 13, 15, 1852.
- Hyalæa inermis*, Gould, The Mollusca and Shells of the United States Exploring Expedition, pl. 51, fig. 604, 1852.

Hyalæx minuta, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 9, 1877.

Hyalæa intermedia, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 10, 1877.

Cavolina quadridentata, Brazier, "Chevert" Expedition. Shells, Proc. Linn. Soc., New South Wales, Vol. II, p. 144, No. 4, 1877, 1878.

Cavolina quadridentata, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 178, 1877.

Hyalæa quadridentata, Sowerby in Reeve, Conch. Icon., Vol. XX, pl. 2, fig. 14, 1877.

Hyalæa costata, Pfeffer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 234, 1879.

Hyalæa quadridentata, Sowerby, Thes. Conch., Vol. V, p. 140, pl. 1, figs. 17, 18, 1884.

Hyalæa intermedia, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 11, 1884.

Hyalæa minuta, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 19, 1884.

Hyalæa quadridentata, Boas, Spolia Atlantica, p. 99, pl. 1, fig. 4; pl. 2, fig. 15, 1886.

Cavolina quadridentata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, pp. 78, 79, 1888.

Cavolina quadridentata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood; Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280; No. 780, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Jackson, Port Stephens. Broken Bay, New South Wales; Port Darwin. Darnley Island, Torres Straits, 30 fathoms; one specimen found. (J. Brazier.) (A.M.) Raine Island, near Torres Straits. H.M.S. "Challenger."

Cavolinia longirostris, Lesueur.

Hyalæa longirostris, Lesueur, MS., in de Blainville, Hyale, Dict. d. Sci. Nat., Vol. XXII, p. 81, 1821.

Hyalæa ecaudata, Lesueur, Dict. d. Sci. Nat., Vol. XXII, p. 82, 1821.

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- Hyalæa longirostris*, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 41, pl. 2, figs. 7, 10, 1852.
- Hyacela femorta*, Gould, The Mollusca and Shells of the United States Exploring Expedition, pl. 51, fig. 603, 1852.
- Hyalæa fissirostris*, Benson, Notes on the Pteropodous genus Hyalæa and description of a new species, Ann. and Mag. Nat. Hist. series 3, Vol. VII, p. 26, 1861.
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- Hyalæa obtusa*, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 8, 1877.
- Hyalæa longirostris*, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 12, 1877.
- Hyalæa limbata*, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 11, 1877.
- Hyalæa limbata*, Sowerby Thes. Conch. Vol. V, p. 141, Pteropoda, pl. 1, figs. 14, 15, 1877.
- Hyalæa longirostris*, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 16, 1877.
- Carolina longirostra*, Brazier, "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. II, p. 144, No. 5, 1877, 1878.
- Hyalæa longirostris*, Boas, Spolia Atlantica, p. 102, pl. 1, fig. 5; pl. 2, fig. 16, 1885.
- Carolinia longirostris*, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 79, 1888.
- Carolina longirostris*, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 781, 1889.
- Habitat*.—Port Jackson, Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; Fitzroy Island, Princess Charlotte Bay, North-east Australia, 13 fathoms; Darnley Island, Torres Straits, 30 fathoms. (J. Brazier). (A.M.) Melbourne to Sydney, Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cavolinia globulosa, Rang.

Carolina globulosa, Rang, MS., in Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 8, 1850.

Cavolina pisum, Mörch, Catalogus conchyliorum quae reliquit C. P. Kjerulf, p. 32, pl. 1, fig. 7, 1850.

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Hyalæa globulosa, Boas, Spolia Atlantica, p. 107, pl. 1, fig. 7; pl. 2, fig. 18, 1886.

Cavolinia globulosa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 81, 1888.

Habitat.—Port Stephens, Port Jackson, New South Wales. (J. Brazier.)

Cavolinia gibbosa, Rang.

Hyalæa gibbosa, Rang., MS., in d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 95, pl. 5, figs. 16, 20, 1836.

Hyalæa flava, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 97, pl. 5, figs. 21, 25, 1836.

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Cavolina flava, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 8, 1850.

Hyalæa gibbosa, Rang, et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 38, pl. 10, figs. 3, 4, 1852.

Hyalæa gibbosa, Edyoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 144, pl. 4, figs. 13, 19, 1852.

Hyalæa gibbosa, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 7, 1887.

Cavolina gibbosa, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 178, 1877.

Hyalæa gegenbauri, Pfeffer, Die Pteropoden der Hamburger Museums, Abhandl. Naturw. Ver. Hamburg, Bd. VII, p. 86, figs. 5, 7, 1880.

Hyalæa gibbosa, Sowerby, Thes. Conch., Vol. XX, p. 140, Pteropoda, pl. 1, figs. 1, 2, 1884.

Hyalæa gibbosa, Boas, Spolia Atlantica, p. 109, pl. 1, fig. 6; pl. 2, fig. 17, 1886.

Cavolinia gibbosa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 82, 1888.

Cavolinia gibbosa, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 281, No. 783, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; Port Darwin, North Australia. (J. Brazier.) Raine Island, near Torres Straits. (H.M.S. "Challenger.")

***Cavolinia tridentata*, Forskål.**

Anomia tridentata, Forskål, Descriptiones animalium quae in itinere orientali observavit, p. 124, 1773.

Anomia aurita scarabaeiformis, Chemnitz, Conch. Cab., Vol. VIII, p. 65, Vignette, pl. 13, fig. G, pp. 72, 108, 1785.

Anomia tridentata, Gmelin, Syst. Nat. Vol. 1, part VI, p. 3348, No. 42, 1790.

Cavolinia natans, Abildgaard, Nyere Efterretning om det Skaldyr som Forskåhar beskrevet under Navnet *Anomia tridentata*, Skirv. naturhist. Selsk., Bd. I, Heft. 2, pl. 10, 1791.

Hyalæa cornea, Lamarek, Anim. sans. Vert., p. 140, 1801.

Hyalæa papilionacea, Bory de St. Vincent, Voyage dans les quatre principales îles des mers d'Afrique, Vol. I, p. 137, pl. 5, fig. 1, 1804.

Hyalæa Peroni, Lesueur, Mémoire sur quelques animaux mollusques, &c., Nouv. Bull. Soc. Philom., Vol. III, p. 284, 1813.

Hyalæa Chemnitziana, Lesueur, Nouv. Bull. Soc. Philom., Vol. III, p. 284, 1813.

Hyalæa Australis, Peron, Voyage de découvertes aux terres australies, Vol. I, pl. 31, fig. 5, 1816.

Hyalæa tridentata, Lamarek, Anim. sans Vert., Vol. VI, part I, p. 286, 1819

Hyalæa Forskahlîi, Lesueur, MS., in de Blainville, Hyale, Dict. d. Sci. Nat. Vol. XXII, p. 79, 1821.

Hyalæa affinis, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V., p. 91, pl. 3, figs. 6, 10, 1836.

Hyalæa tridentata, Lamarek (ed Deshayes), Vol. VII, p. 415, 1836.

Hyalæa truncata, Krauss, Südafrikanische Mollusken, p. 34, pl. 2, fig. 12 (*non* Lesueur), 1848.

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Cavolinia telemus, A. Adams, On the Synonyms and Habitats of Cavolinia, Diacria, and Pleuropus, Ann. and Mag. Nat. Hist., Series 3, Vol. III, p. 44, 1859.

Hyalæa affinis, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 3, 1877.

Hyalæa tridentata, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 4, 1877.

Hyalæa Cumingii, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 5, 1877.

Hyalæa Cumingi, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, fig. 4, 1884.

Hyalæa tridentata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, fig. 5, 1884.

Hyalæa affinis, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, fig. 10, 1884.

Hyalæa tridentata, Boas, Spolia Atlantica, p. 115, pl. 1, fig. 8; pl. 2, fig. 19, p. 211, 1886.

Cavolinia tridentata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 83, 1888.

Habitat.—Broken Bay, Port Stephens (A.M.); Bellinger River, New South Wales; beaches after stormy weather. (J. Brazier).

***Cavolinia uncinata*, Rang.**

Hyalæa uncinata, Rang, MS., in d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 93, pl. 5, figs. 11, 15, 1836.

Cavolina uncinata, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 7, 1850.

Hyalæa uncinata, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 140, pl. 4, figs. 8, 12, 1852.

Hyalæa uncinata, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 37, pl. 2, figs. 11, 14, 1852.

Hyalæa uncinata, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 1, 1877.

Hyalæa uncinatiformis, Pfeffer, Die Pteropoden des Hamburger Museums Abhandl. Naturw. Ver. Hamburg, Bd. 7, p. 85, 1880.

Hyalæa uncinata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, figs. 6, 7, 1884.

Hyalæa uncinata, Boas, Spolia Atlantica, p. 119, pl. 1, fig. 10; pl. 2, fig. 20, 1886.

Cavolinia uncinata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 84, 1888.

Habitat.—Port Jackson (A.M.), Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, New South Wales; Port Darwin, North Australia. (J. Brazier); Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cavolinia inflexa, Lesueur.

Hyalæa inflexa, Lesueur, Mémoire sur quelques animaux mollusques, Nouv. Bull. Soc. Philom., Vol. III, p. 285, pl. 5, fig. 3, 1813.

Hyalæa elongata, Lesueur, MS., in de Blainville, Hyale, Dict. d. Sci. Nat., Vol. XXII, p. 82, 1821.

Hyalæa vaginellina, Cantraine, Bull. Acad. d. Sc., Bruxelles, Vol. II, p. 380, 1835.

Hyalæa labiata, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 104, pl. 6, figs. 21, 25, 1836.

Hyalæa uncinata, Høninghans, MS., in Phillippi, Enumeratio Molluscorum utriusque Siciliæ, p. 101, pl. 6, fig. 18 (*non* Rang), 1836.

Cavolina inflexa, Gray, Catalogue of the Mollusca in the British Museum, part 2, Pteropoda, p. 9, 1850.

Hyalæa inflexa, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 156, pl. 5, figs. 21, 26, 1852.

Hyalæa inflexa, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 44, pl. 3, figs. 9, 10, 12, 1852.

Hyalæa labiata, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 159, pl. 5, figs. 27, 32, 1852.

Hyalæa labiata, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 43, pl. 12, figs. 15, 19, 1852.

Cavolina inflexa, Angas, Molluscan Fauna of Port Jackson, Proc. Zool. Soc., p. 178, 1877.

Hyalæa inflexa (*Diacria*), Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 17^{a, b}, 1877.

Hyalæa labiata (*Diacria*), Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 18^{a, b}, 1877.

Hyalæa imitans, Pfeffer, Die Pteropoden des Hamburger Museums, Abhandl. Naturw. Ver. Hamburg, Bd. 7, p. 90, pl. 7, fig. 9^a, 1880.

Cleodora inflexa, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, figs. 21, 22, 1884.

Diacria labiata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, figs. 23, 24, 1884.

Hyalæa inflexa, Boas, Spolia Atlantica, p. 123, pl. 1, fig. 11; pl. 2, fig. 21, 1886.

Cavolina inflexa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 85, 1888.

Cavolina inflexa, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood; Journal and Proceedings of the Royal Society of New South Wales; Vol. XXIII, p. 281, No. 784, 1889.

Habitat.—Port Jackson, Broken Bay, Port Stephens, New South Wales; Port Darwin, North Australia, and in towing net, Torres Straits. (J. Brazier). Raine Island, near Torres Straits. (H.M.S. "Challenger").

***Cleodora compressa*, Souleyet.**

Clio depressa, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 14, No. 14, 850.

Cleodora compressa, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 181, pl. 6, figs. 26, 32, 1852.

Cleodora compressa, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 51, pl. 12, figs. 20, 25, 1852.

Cleodora compressa, Boas, Spolia Atlantica, p. 85, pl. 4, fig. 58, bis; pl. 4, fig. 50, bis, 1886.

Cleodora compressa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 87, 1888.

Cleodora compressa, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 281, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, New South Wales; Port Darwin. (J. Brazier); Melbourne to Sydney; Sydney to Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Order II.—GYMNOSOMATA.

Family III.—NOTOBRANCHÆIDÆ.

Notobranchæa inopinata, Pelseneer.

Notobranchæa inopinata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XIX, p. 40, pl. 3, fig. 5, 6, 1887.

Notobranchæa inopinata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 767, 1889.

Habitat.—Off Port Jackson Heads, New South Wales. (Dr. Macdonald.)

Family IV.—CLIONIDÆ.

Clione caudata, Macdonald.

Cliona caudata, Macdonald, Trans. Royal Society, Edinburgh, Vol. XXIII, p. 185, pl. 9, fig. 3 (*non C. caudata*, Gray).

Cliona caudata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 768, 1889.

Habitat.—Off Port Jackson Heads, New South Wales. (Dr. Macdonald.)

AUSTRALIAN MUSEUM, SYDNEY.

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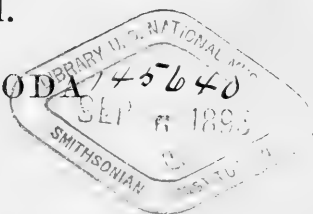
CATALOGUE

OF THE

MARINE SHELLS OF AUSTRALIA AND TASMANIA.

PART III.

GASTEROPODA
MUREX



BY

JOHN BRAZIER, C.M.Z.S., F.L.S.

PRINTED BY ORDER OF THE TRUSTEES.

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1893.

THE present Part contains only the Genus Murex. The remaining genera are not included, from causes beyond my control.

JOHN BRAZIER.

June, 1893.

Sub-class GASTEROPODA, Cuvier, 1798.

Order PROSOBRANCHIATA, Milne-Edwards, 1848.

Family MURICIDÆ, Fleming, 1828.

MUREX, Linné, 1758 ; *Purpura*, Rondelet, 1555 ; Tournefort, 1742 ;
Aranea, Perry, 1811.

Murex tribulus, Linné.

Murex tribulus, Linné, Syst. Nat., 10 edit., p. 746, No. 444, 1758. Syst. Nat., 12 edit., p. 1214, No. 519, 1766 ; Martini, Conch. Cab., Vol. III, pl. 113, figs. 1053, 1054, 1777 ; Gmelin, Syst. Nat., Tome I, pars. VI, p. 3225, No. 2, 1790 ; Tapparone Canefri, Muricidi del Mar Rosso, Annali del Museo Civico di Storia Naturale di Genova, Vol. VII, p. 572, 1875 ; Tapparone-Canefri, Molluschi raccolti nelle Isole Molucche, Annali del Museo Civico di Storia Naturale di Genova, Vol. IX, p. 294, 1876, 1877 ; Sowerby, Thes. Conch., Vol. IV, p. 2, *Murex*, pl. 1, fig. 3, 1879 ; Dunker, Index Molluscorum Maris Japonici, p. 3, 1882 ; Poirier, Revision des *Murex* du Muséum, Nouvelles Archives, Du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 32, No. 4, 1882 ; Reeve, Conch. Icon., Vol. III, pl. 20, fig. 82, 1845 ; Kuster, Conch. Cab., 2nd edit., p. 25, pl. 9, figs. 4, 5. H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858 ; Hanley, Ipsa Linnæi Conchylia, pp. 279, 519, 1855 ; A. Adams, Proc. Zool. Soc., London, p. 370, 1862.

Murex crassispina, Lamarek, Anim. sans Vert., Vol. VII, p. 157, 1822 ; edit. Deshayes, Vol. IX, p. 564, 1843.

Murex ternispina, Kiener (non Lamarek), Iconographie Coquilles Vivantes, p. 6, pl. 8, fig. 1 ; pl. 9, fig. 1, 1840.

Murex crassispina, Vaillant, Journ. de Conch., Vol. XIII, p. 104, No. 4, 1865 ; Fischer, Journ. de Conch., Vol. XIII, p. 244, 1865 ; Issel, Malacologia del Mar Rosso, p. 137, No. 300, 1869 ; Fischer, Journ. de Conch., Vol. XVIII, p. 163, No. 6, 1870.

Murex (Tribulus) tribulus, Kobelt, Catalog der Gattung *Murex* in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 145, No. 2, 1877 ; Tryon, Manual of Conchology, Vol. II, p. 77, pl. 9, fig. 107, 1880.

Murex crassispina, E. v. Martens in Möbius, Beiträge zur Meeresfauna der Insel Mauritius und der Seychellen, p. 231, 1880.

Habitat.—Nicol Bay and North West Cape, Western Australia. (J. Brazier.)

***Murex tenuispina*, Lamarck.**

Murex Tribulus duplicatus, Chemnitz, Conch. Cab., Vol. XI, p. 103, pl. 189, fig. 1821, pl. 190, fig. 1822, 1795.

Murex tenuispina, Lamarck, Anim. sans Vert., Vol. VII, p., 158 (edit. Deshayes), Vol. IX, p. 566. Deshayes, Encycl. Méthod., Vers. Vol. III, p. 896, No. 4. Kiener, Iconographie Coquilles Vivantes, p. 5, pl. 6, fig. 1, pl. 7, fig. 1, 1842; Reeve, Conch. Icon., Vol. III, pl. 21, fig. 85, 1845; Kuster, Conch. Cab., 2nd edition, p. 27, pl. 11, fig. 3, pl. 20, fig. 3. A. Adams, Proc. Zool. Soc., London, p. 370, 1862; Brazier, "Chevert" Expedition Shells, Proc. Linn. Society, New South Wales, Vol. I, p. 169, 1875, 1877; Sowerby, Thes. Conch., Vol. IV, p. 2, pl. 1, Murex, fig. 7, 1879; Poirier, Revision de Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 65, 1882; E. A. Smith, Voyage of H.M.S. "Alert," Collections, p. 42, 1884.

Aranea triremis, Perry, Conchology, pl. 45, fig. 3, 1811.

Murex tenuispinosus, Sowerby, Genera Recent and Fossil Shells, Vol. II, pl. 225.

Murex duplicatus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 71, 1853, 1858.

Murex (Tribulus) tenuispina, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 145, No. 3, 1877.

Murex (Tribulus) tenuispina, Tryon, Manual of Conchology, Vol. II, p. 78, pl. 50, fig. 113, 1880; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 148, 1886.

Murex (Acupurpura) tenuispina, Bayle, 1880, in Fischer Manuel de Conchyliologie, Fascicule. VII, p. 641, 1884.

Habitat.—Darnley Island, Torres Straits, 28 to 30 fathoms, sandy bottom, brought up on the tangles. (J. Brazier.) Torres Straits, 7 to 10 fathoms. (Dr. R. W. Coppinger.) (A.M.)

***Murex ternispina*, Lamarck.**

Murex ternispina, Lamarck, Anim. sans Vert., Vol. VII, p. 158 (edit. Deshayes), Vol. IX, p. 567. Sowerby, Conchological Illustrations, Murex, species 2, fig. 110, 1840; Reeve, Conch. Icon., Vol. III, pl. 18,

fig. 73, pl. 19, fig. 76, 1845 ; Kuster, Conch. Cab., 2nd edition, p. 57 (pl. 22, figs. 3, 4, do not represent this species). Lischke, Japanische Meeres-Conchylien, Vol. I, p. 42, 1861-69 ; Issel, Malac. Mar Rosso, p. 137, No. 299, 1869.

Murex (Tribulus) ternispina, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., p. 145, No. 4, 1877.

Murex ternispina, Sowerby, Thes. Conch., Vol. IV, p. 4, No. 11, Murex pl. 1, fig. 1, 1879 ; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 30, No. 1, 1882.

Murex (Tribulus) ternispina, Tryon, Manual of Conchology, Vol. II, p. 78, pl. 9, fig. 110, 1880 ; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 149, 1886.

Habitat.—Darnley Island, Torres Straits, 20 to 30 fathoms, sandy bottom, brought up on the tangles with *Murex tenuispina*, Lam. (J. Brazier, "Chevert" Expedition.)

This species was inadvertently omitted from my list of Muricidæ collected during the "Chevert" Expedition, Proceedings of the Linnean Society of New South Wales, Vol. I, pp. 169, 172.

***Murex aduncospinosus*, Beck.**

Murex aduncospinosus, Beck, M.S.

Murex ternispina, Var. Sowerby, Conchological Illustrations, fig. 68, 1840.

Murex aduncospinosus, Reeve, Conch. Icon., Vol. III, pl. 23, fig. 93, 1845 ; Beck ; A. Adams, Proc. Zool. Soc., London, p. 370, 1862 ; Beck ; H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 71, 1853, 1878 ; Beck ; Schmeltz, jr., Museum Godeffroy Catalog, V. p. 130, No. 6,470, 1874.

Murex (Tribulus) aduncospinosus, Beck ; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 145, No. 7, 1877.

Murex tribulus, Sowerby, Thes. Conch., Vol. IV, p. 2, Murex, pl. 1, fig. 4, 1879.

Murex (Tribulus) ternispina, Tryon, Manual of Conchology, Vol. II, p. 78, pl. 10, fig. 114, 1880 ; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 146, No. 1, 1886.

Murex aduncospinosus, Reeve (Beck) ; Dunker, Index Molluscorum Maris Japonici, p. 3, 1882 ; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 32, No. 4, 1882.

Habitat.—Nicol Bay, North West Coast of Australia. (W. H. Hargraves.) Torres Straits. (Captain C. Edwards.) (A.M.)

Murex rarispina, Lamarck.

Martini, Conch. Cab., Vol. III, pl. 13, fig. 1055, 1777.

Murex rarispina, Lamarck, Anim. sans Vert., Vol. VII, p. 158, No. 5, 1822 ; 2nd edition, Vol. IX, p. 567. Kiener, Iconographie Coquilles Vivantes, p. 17, pl. 11, fig. 1, 1842 ; Reeve, Conch. Icon., pl. 21, fig. 86, 1845 ; H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 71, 1853.

Murex formosus, Sowerby, Conchological Illustrations, species 16, fig. 112 ; Proc. Zool. Soc., London, p. 139, 1840. Thes. Conch., Vol. IV, p. 6, Murex, pl. 1, fig. 6, 1879.

Murex (Tribulus) rarispina, Kobelt, Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 145, No. 9, 1877 ; Tryon, Manual of Conchology, Vol. II, p. 79, pl. 10, fig. 115, 1880.

Murex rarispina, Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 37, No. 17, 1882 ; Hedley, Proceedings Royal Society, Queensland, Vol. XI, Part V, p. 240, 1889.

Habitat.—Port Darwin, Northern Territory. (W. T. Bednall, 1875.)
Cambridge Gulf, Tasman Land, North Australia. (W. Saville-Kent.)

Murex Martinianus, Reeve.

Martini, Conch. Cab., Vol. III, pl. 113, fig. 1156, 1777.

Murex rarispina, Sowerby (non Lamarck), Conchological Illustrations, species 4, fig. 52, 1840.

Murex Martinianus, Reeve, Proc. Zool. Soc., London, p. 88, 1845. Reeve, Conch. Icon., Vol. III, pl. 18, fig. 72, 1845. Kuster, Conch. Cab., 2nd edition, p. 59, pl. 9, fig. 3, pl. 22, fig. 7, 8.

Murex trapa, Bolten ; H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858. Bolten ; Schmeltz, jr., Museum Godeffroy, Catalogue V, p. 130, No. 3,296, 1874.

Murex (Tribulus) Martinianus, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 146, No. 12, 1877.

Murex rarispina, Sowerby (non Lamarck), Thes. Conch., Vol. IV, Murex, pl. 1, fig. 2, 1879.

Murex Martinianus, Tryon, Manual of Conchology, Vol. II, p. 78, pl. 11, fig. 118, 1880. Dunker, Index Molluscorum Maris Japonici, p. 3, 1882.

Murex Martianus, Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 34, No. 10, 1882.

Murex trapa, Bolten ; Mörch, Yoldi Cat., p. 98.

Habitat.—Port Denison, North Queensland. (Madame A. Dietrich.)

Murex Macgillivrayi, Dohrn.

Murex Macgillivrayi, Dohrn, Proc. Zool. Soc., London, p. 203, No. 4, 1862.

Murex brevispina, Brazier (non Lamarek), "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 169, No. 2, 1875, 1877.

Murex Macgillivrayi, Sowerby, Thes. Conch., Vol. IV, p. 3, pl. 17, fig. 162, (wrongly coloured), 1879.

Murex (Tribulus) scolopax, Tryon, Manual of Conchology, Vol. II, p. 77, pl. 24, fig. 208, 1880, copied from Sowerby.

Murex Macgillivrayi, Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 35, No. 12, 1882 ; E. A. Smith, Voyage of H.M.S. "Alert," Collections, p. 44, pl. 5, fig. C, 1884.

Murex (Tribulus) Macgillivrayi, Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 147, 1886.

Habitat.—Lizard Island, North Queensland. (John Macgillivray.) Princess Charlotte Bay, 14 fathoms sandy mud bottom ; Cape Grenville, North Queensland, 20 to 30 fathoms ; Cleveland Bay. (J. Brazier, "Chevert" Expedition.) Cape York, 6 to 11 fathoms ; Port Curtis (A.M.) 10 to 11 fathoms ; Port Darwin, 8 to 12 fathoms ; Prince of Wales Channel, Torres Straits, 7 to 9 fathoms. (Dr. Coppinger.) Cape York, off Albany Island, North Queensland, 3 to 12 fathoms (H.M.S. "Challenger") ; Port Darwin, Northern Territory. (T. W. Bednall, 1875.) (A.M.)

Murex acanthodes, Watson.

Murex (Tribulus) acanthodes, Watson, Prelim. Report, Part XV, Journal Linnean Society, Zool., London, Vol. XVI, p. 589, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 151, pl. 10, fig. 1, 1886.

Habitat.—Cape York, off Albany Island, North Australia, 3 to 12 fathoms. (H.M.S. "Challenger.")

Murex Coppingeri, E. A. Smith.

Murex Coppingeri, E. A. Smith, Voyage of H.M.S. "Alert," Collections, p. 42, pl. 5, fig. A, 1884.

Habitat.—Dundas Straits, Melville Island, North Coast of Australia, 17 fathoms. (Dr. Coppinger.) Port Darwin Beach. (W. T. Bednall, 1875.)

Murex acanthostephes, Watson.

Murex (Tribulus) acanthostephes, Watson, Prelim. Report, Part XV, Journal Linnean Society, Zool., London, Vol. XVI, p. 593. Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 149, pl. 10, fig. 2, 1886.

Murex acanthostephes, E. A. Smith, Voyage of H.M.S. "Alert," Collections, p. 43, pl. 5, fig. B, 1884.

Habitat.—Arafura Sea, North West Cost of Australia, 32 to 36 fathoms, bottom mud, sand, and shells. (Dr. R. W. Coppinger.) West of Cape York, off South West point of New Guinea, 28 fathoms. (H.M.S. "Challenger.")

Murex eximius, Brazier.

Murex eximius, Brazier, "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 170, No. 3, 1875, 1877. Tryon, Manual of Conchology, Vol. II, p. 80, 1880.

Habitat.—Darnley Island, Torres Straits, 30 fathoms, brought up on the tangles, bottom sand. (J. Brazier.)

HAUSTELLUM, Klein, 1753; *BRONTES*, Montfort, 1810;

HAUSTELLARIA, Swainson, 1840.

Murex haustellum, Linné.

Murex haustellum, Linné, Syst. Nat., edition XII, p. 1213, No. 518, 1766. Gmelin, Syst. Nat., Vol. I, Part VI, p. 3524, No. 1, 1790.

Haustellum fimbriatenodosum, Martini, Conch. Cab., Vol. III, p. 376, pl. 115, fig. 1066, 1777.

Aranea denudata, Perry, Conchology, pl. 45, fig. 1, 1811.

Haustellum læve, Schumacher, Nouv. Syst., p. 213, 1817.

Murex haustellum, Lamarek, Anim. sans Vert., Vol. III, p. 159, No. 8, 1822; 2nd edition, Vol. IX, p. 568. Kiener, Iconographie Coquilles Vivantes, p. 10, pl. 13, fig. 1, 1842; Reeve, Conch. Icon., Vol. III, pl. 23, fig. 95, 1845; Kuster, Conch. Cab., 2nd edition, p. 35, pl. 14, fig. 3. Hanley, Ipsa Linnæi Conchylia, p. 279, 1855.

Murex (Haustellum) haustellum, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858; Schmeitz, jr., Museum Godeffroy, Catalog V, p. 130, No. 3297, 1874.

Murex (Haustellum) haustellum, Tapparone-Canefri, Muricidi del Mar Rosso, Annali del Museo Civico di Storia Naturale di Genova, Vol. VII, p. 574, 1875; Tapparone-Canefri, La Faune Malacologique de l'île Maurice, Annales de la Société Malacologique de Belgique, Tome XV (Deuxième Série, Tome V), p. 10, 1880; Dunker, Index Molluscorum Maris Japonici, p. 4, 1882; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 42, No. 42, 1882.

Murex haustellum, Kobelt, Die Muriciden des rothen Meeres, Jahrb. d. deutsch. malak. Gesellsch., Vol. III, p. 40, No. 6, 1876; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 148, No. 36, 1877; Sowerby, Thes. Conch., Vol. IV, p. 5, Murex, pl. 2, fig. 17, 1879; Tryon, Manual of Conchology, Vol. II, p. 83, pl. 13, fig. 137, 1880; E. v. Martens, in Mobius, Beiträge zur Meeresfauna der Insel Mauritius und der Seychellen, p. 231, 1880.

Habitat.—Nicol Bay and Dampier's Archipelago, North-West Australia. (J. F. Bailey.)

CHICOREUS, Montfort, 1810; *CHICHOUREUS*, Tapparone Canefri, 1874; *CICHOUREUS*, E. v. Martens, 1880.

Murex ramosus, Linné.

Murex ramosus, Linn., Syst. Nat., Ed. XII, p. 1215, 1766.

Purpura eques friscus, Martini, Conch. Cab., Vol. III, p. 308, pl. 102, fig. 980, pl. 103, fig. 981, 1777.

Purpura incarnata, Boltén, Museum Boltenianum, 1st edition, p. 142.

Murex inflatus, Lamarek, Anim. sans Vert., Vol. VII, p. 160, 1822; edit. Deshayes, Vol. IX, p. 570, 1843; Kuster, Conch. Cab., 2nd edition, p. 5, pl. A; pl. 1, fig. 1; pl. 2, fig. 2. Kiener, Iconographie Coquilles Vivantes, p. 21, pl. 1, 1842; Kobelt, Die Muriciden des rothen Meeres, Jahrb. d. deutsch. malak. Gesellsch., Vol. III, p. 40, No. 7, 1876.

Murex ramosus, Reeve, Conch. Icon., Vol. III, pl. 1, fig. 3, 1845.

Murex (Chicoreus) frondosus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858.

Murex (Chicoreus) ramosus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, part III, p. 72, 1853, 1858; Brazier, "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 170, No. 4, 1875, 1877.

Murex (Chichoreus) incarnatus, Tapparone-Canefri, Muricidi del Mar Rosso, Annali del Museo Civico di Storia Naturale di Genova, Vol. VII, p. 575, 1875.

Murex (Chicoreus) inflatus Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 148, 1877.

Murex ramosus, Sowerby, Thes. Conch., Vol. IV, p. 11, pl. 8, Murex, fig. 69, 1879.

Murex (Chichoreus) inflatus, E. v. Martens in Möbius Beiträge zur Meeres-fauna der Insel Mauritius und der Seychellen, p. 231, 1880.

Murex (Chicoreus) ramosus, Tryon, Manual of Conchology, Vol. II, p. 95, pl. 1, figs. 1, 2, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 50, No. 52, 1882.

Murex (Chichoreus) incarnatus, Tapparone-Canefri, La Faune Malacologique de l'île Maurice, Mémoires de la Société Malacologique de Belgique, Tome XV (Deuxième Série, Tome V), p. 13, 1880.

Murex frondosus, Mörch, Yoldi Catalogue, p. 97.

Murex incarnatus, Mörch, Yoldi Catalogue, p. 97.

Habitat.—Darnley Island, Torres Straits, found on the reefs. (J. Brazier.) Nicol Bay, Western Australia. (J. F. Bailey.)

Murex monodon, Sowerby.

Martini, Conch. Cab., Vol. III, p. 314, pl. 105, figs. 987, 988, 1777.

Murex Monodon, Sowerby, Tankerville Catalogue, Appendix, p. 19, No. 1703, 1825; Lamarck, Anim. s. Vert. (edit. Deshayes), Vol. IX, p. 604, 1843; Reeve, Conch. Icon., Vol. III, pl. 5, fig. 21, 1845. Kuster, Conch. Cab., 2nd edition, p. 39, pl. 16, figs. 1, 2. Sowerby, Thes. Conch., Vol. IV, p. 10, pl. 8, Murex, figs. 55, 56, 1879.

Murex aranea, Kiener, Iconographie Coquilles Vivantes, p. 34, pl. 36, fig. 1, 1842.

Murex (Chicoreus) monodon, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 151, 1877.

Murex (Chicoreus) monodon, Tryon, Manual of Conchology, Vol. II, p. 92, pl. 16, fig. 158, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 37, No. 42, 1882.

Murex monodon, E. A. Smith, Voyage of H.M.S. "Alert," Collections, p. 46, No. 18, 1884.

Murex (Euphyllon) monodon, Jousseaume, 1880, in Fischer, Manuel de Conchyliologie, Fascicule VII, p. 641, 1884.

Murex (Chicoreus) monodon, Brazier, Proc. Linn. Soc., New South Wales, Vol. IX, p. 793, 1884, 1885; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 154, 1886.

Habitat.—Dupuch Island, Western Australia. (Lieutenant Dring, R.N.) Cossack, Dampier's Land, North West Coast of Australia. (J. F. Bailey.) Albany Island, North Queensland, 3, 8 fathoms. (Dr. Coppinger.) Near Cape York, 6 fathoms, coral mud. (H.M.S. "Challenger.") Nicol Bay, North-West Australia. (A.M.)

Dupuch Island is not in Torres Straits, as quoted by Reeve and other authors.

Murex cervicornis, Lamarck.

Murex cervicornis, Lamarck, Anim. sans Vert., Vol. VII, p. 163, No. 19, 1822 (edit. Deshayes), Vol. IX, p. 575, No. 19, 1843; Sowerby, Genera Recent and Fossil Shells, Vol. II, *Murex*, pl. 224, fig. 4. Kiener, Iconographie Coquilles Vivantes, p. 32, pl. 20, fig. 2, 1842; Reeve, Conch. Icon., Vol. III, pl. 16, fig. 66, 1845; Kuster, Conch. Cab., 2nd edition, p. 87, pl. 31, figs. 5, 6.

Murex (Chicoreus) cervicornis, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858; Kobelt, Catalog der Gattung *Murex* in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 152, No. 69, 1877; Brazier, "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 171, No. 8, 1875, 1877; Tryon, Manual of Conchology, Vol. II, p. 92, pl. 15, fig. 155, 1880; Poirier, Revision des *Murex* du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 46, No. 44, 1882; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 154, 1886.

Murex cervicornis, Sowerby, Thes. Conch., Vol. IV, p. 11, pl. 3, *Murex*, fig. 30, 1879; E. A. Smith, Voyage of H.M.S. "Alert," Collections, p. 45, No. 16, 1884; Hedley, Proc. Royal Society, Queensland, Vol. VI, Part V, p. 240, 1889.

Habitat.—New Holland. (Lamarck.) Darnley Island, Torres Straits, 20, 30 fathoms, sandy mud bottom brought up in the dredge and on the tangles. (J. Brazier, 1875.) Thursday Island, 4 fathoms; Prince of Wales Channel; Torres Straits; Clairmont Island, 11 fathoms; Port Darwin, Northern Territory, 8, 12 fathoms. (Dr. R. W. Coppinger.) Nicol Bay, North West Coast of Australia, found on the beaches after gales; Albany Passage, Cape York, North Queensland; off Twofold Bay, New South

Wales, 150 fathoms. (J. Brazier.) Off Sydney Heads, 80, 90 fathoms sandy bottom. (Henry Prince and T. Haylock.) Near Cape York, 6 fathoms, coral mud; West of Cape York, off South West point of Papua, 28 fathoms, green mud. (H.M.S. "Challenger.") Port Darwin, Northern Territory. (W. Saville-Kent.) East Coast of Australia. (British Museum.)

***Murex recticornis*, Martens.**

Murex recticornis, E. v. Martens; Kobelt in Jahrb. d. deutsch. malak. Gesellsch., Vol. VII, p. 81, pl. 3, fig. 3, 1880.

Habitat.—East Coast of Australia, 26° 5 S. Lat. in 76 fathoms, obtained by the Expedition of the German War-ship "Gazelle."

The above locality is off the Queensland Coast, near Wide Bay; this species is nearly allied to *Murex cervicornis*, Lam.

***Murex axicornis*, Lamarek.**

Martini, Conch., Cab., Vol. III, pl. 105, fig. 989, 1777.

Murex axicornis, Lamarek, Anim. sans Vert., Vol. VII, p. 163, No. 18, 1822 (2nd edition Deshayes), Vol. IX, p. 574, 1843; Kiener, Iconographie Coquilles Vivantes, p. 31, pl. 42, fig. 2, 1842; Kuster, Conch. Cab., 2nd edition, p. 40, pl. 16, fig. 3; pl. 21, fig. 3. Reeve, Conch. Icon., Vol. III, pl. 15, fig. 37; pl. 10, fig. 37, Variety, 1845.

Murex axicornis, Var., Sowerby, Conchological Illustrations, species 30, fig. 66, 1840.

Murex (Chicoreus) axicornis, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858; Brazier, Proc. Linn. Soc., New South Wales, Vol. I, p. 171, No. 7, 1875, 1877; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 152, No. 68, 1877.

Murex axicornis, Sowerby, Thes. Conch., Vol. IV, p. 11, pl. 3, Murex, fig. 31, 1879. E. A. Smith, Voyage of H.M.S. "Alert," Collections, p. 44, No. 15, 1881.

Murex (Chicoreus) axicornis, Tryon, Manual of Conchology, Vol. II, p. 92, pl. 16, fig. 161, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 46, No. 43, 1882.

Habitat.—Palm Island, North East Coast of Australia, now called North Queensland, 8 fathoms, muddy bottom. (J. Brazier.) Prince of Wales Channel, 5, 7 fathoms, and Thursday Island, Torres Straits, 4 fathoms. (Dr. R. W. Coppinger.) (A.M.)

Murex Sauliæ, Sowerby.

Murex Saulii, Sowerby, Proc. Zool. Soc., London, p. 141, 1840; Sowerby, Conchological Illustrations, species 34, fig. 77, 1840; Deshayes in Lamarek, Anim. sans. Vert., Vol. IX, p. 607, No. 76, 1843.

Murex palmarosæ, Var., Kiener, Iconographie Coquilles Vivantes, p. 29, 1842.

Murex Saulæ, Reeve, Conch. Icon., Vol. III, pl. 8, fig. 31, 1845.

Murex (Chicoreus) Sauliæ, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, 1853, 1858; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 149, No. 41, 1877.

Murex Saulii, Liénard, Catalogue de la Faune Malacologique de l'île Maurice, p. 2, No. 14, 1877.

Murex Saulæ, Sowerby, Thes. Conch., Vol. IV, p. 13, pl. 4, Murex, fig. 44; pl. 22, fig. 212, 1879.

Murex (Chicoreus) Sauliæ, Tapparone-Canefri, La Faune Malacologique de l'île Maurice, Mémoires de la Société Malacologique de Belgique, Tome XV (Deuxième Série, Tome V), p. 12, 1880.

Murex (Chicoreus) Sauliæ, Martens in Möbius, Beiträge zur Meeresfauna der Insel Mauritius und der Seychellen, p. 232, 1880.

Murex (Chicoreus) maurus, Var., Tryon, Manual of Conchology, Vol. II, p. 89, pl. 14, fig. 142, 1880.

Murex (Chicoreus) saullæ, Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 54, No. 61, 1882.

Habitat.—Torres Straits, North Coast of Australia. (W. H. Hargraves.) Vlaming Head, North West Cape, Western Australia. (J. Brazier.) (A.M.)

Murex torrefactus, Sowerby.

Murex torrefactus, Sowerby, Proc. Zool. Soc., London, p. 141, 1840; Sowerby, Conchological Illustrations, species 35, fig. 120, 1840; Reeve, Conch. Icon., Vol. III, pl. 10, fig. 41, 1845; Sowerby, Thes. Conch., Vol. IV, p. 15, pl. 5, Murex, fig. 47, 1879.

Murex microphyllus, Kiener (non Lamarek), Iconographie Coquilles Vivantes, pl. 23, fig. 1, 1842.

Murex (Chicoreus) torrefactus, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 150, No. 47, 1877; Tryon, Manual of Conchology, Vol. II, p. 89, pl. 14, fig. 145, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 56, No. 66, 1882.

Habitat.—Nicol Bay, North West Coast of Australia. (W. H. Hargraves.) (A.M.)

Murex microphyllus, Lamarck.

Purpura variegata, Martini, Conch. Cab., Vol. III, pp. 305, 322, pl. 106, fig. 995, 1777.

Murex microphyllus, Lamarck, Anim. sans Vert., Vol. VII, p. 163 (edit. Deshayes), Vol. IX, p. 575. Sowerby, Conchological Illustrations, species 38, fig. 105, 1841; Reeve, Conch. Icon., Vol. III, pl. 10, fig. 40, 1845; Kuster, Conch. Cab., 2nd edition, p. 18, pl. 6, fig. 3.

Murex (Chicoreus) microphyllus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858; Schmeltz, jr., Museum Godeffroy Catalog V, p. 103, No. 1,057, 1874; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 149, 1877; Tryon, Manual of Conchology, Vol. II, p. 89, pl. 14, fig. 144, 1880; Tapparone-Canefri, La Faune Malacologique de l'île Maurice, Mémoires de la Société Malacologique de Belgique, Tome XV (Deuxième Série, Tome V), p. 19, 1880.

Murex (Cichoreus) microphyllus, E. v. Martens in Möbius Beiträge zur Meeresfauna der insel Mauritius und der Seychellen, p. 232, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 56, No. 65, 1882.

Habitat.—Torres Straits. (C. E. Beddome, Dr. J. C. Cox.)

Murex maurus, Broderip.

Murex maurus, Broderip, Proc. Zool. Soc., London, p. 174, 1832; Kiener, Iconographie Coquilles Vivantes, p. 39 (*Murex adustus*, in part); Sowerby, Conchological Illustrations, species 39, figs. 12, 67, 1840; Reeve, Conch. Icon., Vol. III, pl. 4, fig. 16, 1845; Deshayes in Lamarck, Anim. sans Vert., Vol. IX, p. 573, note 1843; Sowerby, Thes. Conch., Vol. IV, p. 15; *Murex*, pl. 5, fig. 54, 1879.

Murex (Chicoreus) maurus, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 150, No. 48, 1877; Tryon, Manual of Conchology, Vol. II, p. 89, pl. 14, fig. 139, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 59, No. 70, 1882; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 154, 1886.

Habitat.—Cape York, off Albany Island, Torres Straits, 3 to 12 fathoms. (H.M.S. "Challenger.") Holborn Island, off Port Denison, Queensland, 6 fathoms, sand bottom. (J. Brazier.)

Murex Banksi, Sowerby.

Murex Banksii, Sowerby, Proc. Zool. Soc., London, p. 141, 1840; Conchological Illustrations, species 31, fig. 82, 1840; Kiener, Iconographie Coquilles Vivantes, p. 36, pl. 21, fig. 1; Reeve, Conch. Icon., Vol. III, pl. 10, fig. 38, 1845; Kuster, Conch. Cab., 2nd edition, p. 120, pl. 36, fig. 6; Sowerby, Thes. Conch., Vol. IV, p. 17; Murex, pl. 6, fig. 59.

Murex (Chicoreus) Banksii, Tapparone-Canefri, Muricidi Del Mar Rosso, Annali del Museo Civico di Storia Naturale di Genova, Vol. VII, p. 580, 1875.

Murex (Chicoreus) Banksii, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 150, No. 54, 1877; Tryon, Manual of Conchology, Vol. II, p. 89, pl. 14, fig. 141, 1880.

Habitat.—Nicol Bay, North West Australia. (A.M.) (Mr. W. H. Hargraves.)

Murex adustus, Lamarek.

Purpura Brandaris niger, Martini, Conch. Cab., Vol. III, p. 317, pl. 105, figs. 990, 991, 1777.

Purpura scabra, Martyn, Universal Conchologist, Vol. II, fig. 113, 1789.

Murex adustus, Lamarek, Anim. sans Vert., Vol. VII, p. 162 (edition Deshayes), Vol. IX, p. 573.

Triplex flavicunda, Perry, Conchology, pl. 6, fig. 2, 1811.

Triplex rubicunda, Perry, Conchology, pl. 6, fig. 4, 1811.

Murex adustus, Blainville, Manuel de Malacologie et Conchyliologie, Vol. I, p. 401; Vol. II, pl. 19, fig. 4, 1825; Kiener, Iconographie Coquilles Vivantes, p. 38, pl. 33, fig. 1, 1842; Menke, Molluscorum Novae Hollandiae, p. 24, No. 110, 1843; Reeve, Conch. Icon., Vol. III, pl. 8, fig. 29, 1845; Kuster, Conch. Cab., 2nd edition, p. 31, pl. 13, fig. 5; Eydoux et Souleyet, Voyage de la "Bonite" Zoologie, Vol. II, p. 619, Atlas pl. 44, figs. 3, 5, 1852; A. Adams, Proc. Zool. Soc., London, p. 371, 1862.

Murex despectus, A. Adams, Proc. Zool. Soc., London, p. 72, 1853.

Murex (Chicoreus) adustus, E. A. Smith, Annals Mag. Nat. History, 4 series, Vol. XV, p. 419, No. 20, 1875; Brazier, "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 170, No. 5, 1876; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 149, 1877; Tryon, Manual of Conchology, Vol. II, p. 90, pl. 15, fig. 149, pl. 24, fig. 211, 1880; E. v. Martens in Möbius, Beiträge zur Meeresfauna der Insel Mauritius und der Seychellen, p. 232, 1880;

Tapparone-Canefri, La Faune Malacologique de l'île Maurice, Mémoires de la Société Malacologique de Belgique, Tome XV (Deuxième Série, Tome V), p. 11, 1880; Dunker, Index Molluscorum Maris Japonici, p. 4, 1832; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 59, No. 72, 1832; E. A. Smith, Marine Mollusca of St. Helena, Proc. Zool. Soc., London, p. 258, 1890.

Murex adustus, Liénard, Catalogue de la Faune Malacologique de l'île Maurice, p. 2, No. 3, 1877; Sowerby, Thes. Conch., Vol. IV, p. 16, Murex, pl. 4, figs. 42, 43, 1879.

Murex despectus, Sowerby, Thes. Conch., Vol. IV, p. 16, Murex, pl. 9, fig. 85, 1879.

Habitat.—Darnley Island, Torres Straits; found on the reefs at low water, under coral and stones. (J. Brazier.) King's Sound, North-West Australia. (A.M.)

***Murex capucinus*, Chemnitz.**

Martini, Conch. Cab., Vol. III, pl. 105, fig. 993, 1777.

Murex monachus capucinus, Chemnitz, Conch. Cab., Vol. XI, p. 123, pl. 192, fig. 1849, 1850, 1795.

Murex ramosus, Variety C, Dillwyn, Descriptive Catalogue of Recent Shells, Vol. II, p. 687, 1817.

Murex capucinus, Lamarek, Anim. sans Vert., Vol. VII, p. 164, 1822 (2nd edition, Deshayes). (Vol. IX, p. 576, 1843); Deshayes, Encyclopédie Méthodique Histoire Naturelle Des Vers, Tome III, p. 900, No. 12, 1832; Lamarek; Sowerby, Conchological Illustrations, p. 3, species 40, 1840; Lam.; Kiener, Coquilles Vivantes, p. 42, pl. 45, fig. 2, 1842.

Murex capucinus, Lam.; Menke, Molluscorum Novae Hollandiae, p. 24, No. 111, 1843. Chemnitz; Reeve, Conch. Icon., Vol. III, pl. 2, fig. 10, 1845. Lamarek; Kuster, Conch. Cab., 2nd edition, p. 32, pl. 13, figs. 6, 7. Chemnitz; Tapparone-Canefri, III. Contribuzioni Per Una Fauna Malacologica Delle Isole Papuane, Annali del Museo Civico di Storia Naturale di Genova, Vol. VIII, p. 323, 1876.

Murex (Chicoreus) capucinus, Chemnitz; H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858; Chemnitz; Schmeltz, jr., Muséum Godeffroy Catalog V, p. 130, No. 591, 1874. Lamarek; Kobelt, Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 150, No. 50, 1877; Tryon, Manual of Conchology, Vol. II, pp. 99, 184, pl. 19, fig. 174, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 63, No. 85, 1882.

Murex (Chicoreus) capucinus, Tapparone-Canefri, Contribuzioni Per Una Fauna Malacologica Delle Isole Papuane, Annali del Museo Civico di Storia Naturale di Genova, Vol. VI, p. 550, 1874.

Murex capucinus, Chemnitz; Sowerby, Thes. Conch., Vol. IV, p. 18, *Murex*, pl. 4, fig. 40, 1879; Hedley, Proc. Royal Society, Queensland, Vol. VI, Part V, p. 240, 1889.

Habitat.—Torres Straits. (A.M.) Port Darwin, Northern Territory, (T. W. Bednall, 1875.) Port Essington, Coburg Peninsular, Northern Territory. (E. Spalding.) Great Barrier Reef, east of Cape Sidmouth, North Queensland; found under coral blocks at half tide (J. Brazier, "Eclipse" Expedition, December, 1871.) Cambridge Gulf, North-West Australia; Port Darwin, Northern Territory; Barrier Reef. (W. Saville-Kent, 1888.)

***Murex Australiensis*, A. Adams.**

Murex Australiensis, A. Adams, Proc. Zool. Soc., London, p. 72, 1853. Sowerby, Thes. Conch., Vol. IV, p. 16, *Murex*, pl. 6, fig. 58, 1879.

Murex (Ocinebra) Australiensis, Kobelt, Catalog der Gattung *Murex* in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 248, No. 224, 1877.

Murex (Chicoreus) adustus, Var. Tryon, Manual of Conchology, Vol. II, p. 90, pl. 24, fig. 210, 1880.

Murex (Chicoreus) Australiensis, Poirier, Revision des *Murex* du Muséum Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 61, No. 75, 1882.

Habitat.—Australia (Mus. Cuming in British Museum). Wreck Reef, Coral Sea, off the North Queensland Coast, outside the Great Barrier Reef. (J. Brazier, 1856.) (A.M.)

This species is not found in South Australia as quoted by Mr. G. B. Sowerby in *Thesaurus Conchyliorum*, *Murex*, pl. 6.

***Murex Huttoniæ*, Wright.**

Murex Huttoniæ, Wright, Annales de la Société Malacologique de Belgique, Tome XIII (Deuxième Série, Tome III), p. 85, pl. 9, 1878; Sowerby, Thes. Conch., Vol. IV, p. 17, *Murex*, pl. 6, fig. 57, 1879.

Murex (Chicoreus) adustus, Variety, Tryon, Manual of Conchology, Vol. II, p. 90, pl. 25, fig. 217, 1880.

Murex (Chicoreus) Huttoniæ, Poirier, Revision des *Murex* du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 60, No. 74, 1882.

Habitat.—New Caledonia. (Wright.) Wreck Reef, Coral Sea, off the North Queensland Coast, outside the Great Barrier Reef; Chesterfield Shoals and Island, and Bampton Reef, West North West from New Caledonia. (J. Brazier, 1855, 1856.) (A.M.)

These two species, *M. Australiensis*, A. Adams, and *M. Huttonia*, Wright, are classed by Mr. Tryon, who was only acquainted with these shells by figures and not by specimens, in his Manual as mere varieties of *M. adustus*, Lamarek. In this he is wrong, for they are certainly quite distinct from that species, both as regards fronds, sculpture, and colour.

Murex australis, Quoy and Gaimard.

Triplex pondosa, Perry, Conchology or the Natural History of Shells, pl. VI, fig. 1, 1811.

Murex australis, Quoy et Gaimard, Voyage de "l'Astrolabe," Tome II, p. 536, 1832.

Murex palmiferus, Sowerby, Proc. Zool. Soc., London, p. 142, 1840; Conchological Illustrations, species 43, fig. 104, 1840; Reeve, Conch. Icon., Vol. III, pl. 4, fig. 20, 1845.

Murex (Chicoreus) palmiferus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 72, 1853, 1858; Angas, Proc. Zool. Soc., London, p. 186, No. 6, 1867; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 150, No. 55, 1877; Tryon, Manual of Conchology, Vol. II, p. 90, pl. 14, fig. 146, 1880; Tapparone-Canefri, La Faune Malacologique de l'île Maurice, Annales de la Société Malacologique de Belgique, Tome XV (Deuxième Série, Tome V), p. 10, 1880; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 155, 1886.

Murex (Chichoreus) palmiferus, Tapparone-Canefri, Muricidi Del Mar Rosso, Annali del Museo Civico di Storia Naturale di Genova, Vol. VII, p. 580, 1875.

Murex palmiferus, Kobelt, Die Muriciden des rothen Meeres, Jahrb. d. deutsch malak. Gesellsch., Vol. III, p. 42, No. 14, 1876; Sowerby, Thes. Conch., Vol. IV, p. 18, No. 84, pl. 4, Murex, fig. 41, 1879.

Murex (Tribulus) australis, Tryon, Manual of Conchology, Vol. II, p. 83, 1880.

Murex (Chicoreus) australis, Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle Deuxième Série, Tome V, p. 32, No. 4, 1882.

Murex palmiferus, Sowerby; Whitelegge, List of the Marine and Fresh Water Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 246, No. 208, 1889.

Habitat.—Port Western, New Holland. (Quoy et Gaimard, 1829.) Sydney. (Dutailly.) New Holland. (M. J. Verreaux, 1846.) New Caledonia. (M. Deshayes, 1879.) Red Sea. (Sowerby, 1840.) North Australia. (Reeve, 1845.) Between Balls Head and Goat Island, 18 fathoms, bottom broken shells, stones, and gravel; Point Piper, Middle Harbour, Watson's Bay, under stones at low water spring tides; Cape Solander, South Head, and Cape Banks, North Head, of Botany Bay; South Head of Crook Haven River, Shoalhaven, found under stones low water springs; Montague Roads, Jervis Bay, near the rocks in 5 fathoms; Nelson Head and Bay, Port Stephens, New South Wales, under stones low water spring tides. (J. Brazier, 1854, 1892.) Woolloomooloo Bay. (G. F. Angas.) Neutral Bay, Port Jackson. (T. Whitelegge.) Yeppoon, Keppell Bay, Queensland. (George L. Pilcher, 1887.) Largs Bay, South Australia. (Arnold U. Henn, 1891.)

I have not seen this species any farther south of Sydney than Jervis Bay, where I dredged specimens on October 31, 1874. The specimens said to be obtained by Quoy and Gaimard at Port Western, New Holland (now Victoria), may have been dredged by them. I had not seen any species like it from Southern Australia, until quite recently, when two specimens were obtained from shell debris, by my friend Mr. Arnold U. Henn, at Largs Bay, South Australia, in November, 1891.

I quote M. M. J. Poirier, from the *Nouvelles Archives du Muséum D'Histoire Naturelle*, p. 65: "This species, of Quoy and Gaimard, misunderstood by all authors, has nearly the same geographical range as *M. corrugatus*, Sowerby, with which, besides, it has many analogies. It has been remarked on the northern coasts of Australia and in the Red Sea. It is represented by twelve individuals coming from Port Western (the types of Quoy and Gaimard, 1829), from Sydney (Coll. Dutailly), from New Holland (M. J. Verreaux, 1846), and from New Caledonia (M. Deshayes, 1874). The *M. australis*, Quoy and G., not figured in the atlas of the voyage of the "Astrolabe," has been lost in forgetfulness by the various writers who have dealt with the genus *Murex*. Tryon alone admits it, but without recognising its affinities, and he places it among the group of *Tribulus*. An examination of the types preserved in the collection of the Museum* has shown me that this species is no other than that described by Sowerby under the name of *M. palmiferus*. This denomination being the latest, ought then to pass into the synonymy."

* Museum of the Jardin des Plantes, Paris.

The Rev. Boog Watson, in his Report on the Gasteropoda of H.M.S. "Challenger," Zoology, Vol. XV, p. 155, appears to have followed Mr. Tryon in lumping *M. palmiferus*, Sowb., = *australis*, Quoy and G., with three distinct and well known species, namely, *Murex corrugatus*, Sowb.; *Murex multifrondosus*, Sowb.; and *Murex dilectus*, A. Adams.

***Murex corrugatus*, Sowerby.**

Murex corrugatus, Sowerby, Proc. Zool. Soc., London, p. 142, 1840; Conchological Illustrations, species 44, fig. 72, 1840; Kiener, Iconographie Coquilles Vivantes, p. 43, No. 32, pl. 19, fig. 2, 1842; Reeve, Conch. Icon., Vol. III, pl. 13., fig. 52, 1845; Kuster, Conch., Cab., 2nd edition, p. 73, pl. 26, fig. 3. Vaillant, Recherche sur la faune Malacologique de la baie de Suez, Journ. de Conch., Vol. XIII, p. 105, No. 5, 1865; Fischer, Faune Conchyliologique de Suez Mer Rouge, Journ. de Conch., Vol. XIII, p. 244, 1865.

Murex (Chicoreus) corrugatus, H. and A. Adams, Genera of Recent Mollusca, Vol. II, Part III, p. 72, 1853, 1858.

Murex corrugatus, Issel, Malacologia Del Mar Rosso, p. 135, No. 292, 1869. Fischer, Sur la Faune Conchyliologique marine des baies de Suez et l'Akabah, Journ. de Conch., Vol. XVIII, p. 163, No. 5, 1870.

Murex (Chicoreus) corrugatus, Brazier, Proc. Linn. Soc., New South Wales, Vol. I, p. 171, No. 6, 1875, 1877; Tapparone-Canefri, Muricidi del Mar Rosso, Annali del Museo Civico di Storia Naturale di Genova, Vol. VII, p. 579, 1875; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 150, No. 57, 1877; Var., Tryon, Manual of Conchology, p. 90, pl. 14, fig. 147, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 64, No. 89, 1882.

Murex corrugatus, Kobelt, Die Muriciden des rothen Meeres, Jahrb. d. deutsch. malak. Gesellsch., Vol. III, p. 42, No. 13, 1876; Sowerby, Thes. Conch., Vol. IV, p. 19, No. 89, Murex, pl. 9, fig. 72, 1879.

Habitat.—North Australia. (Reeve.) Palm Island, North East Coast of Australia, now called North Queensland; two specimens brought up on the tangles from 8 fathoms, muddy bottom. (J. Brazier.)

***Murex territus*, Reeve.**

Murex territus, Reeve, Proc. Zool. Soc., London, p. 108, 1845; Reeve, Conch. Icon., Vol. III, pl. 33, fig. 167, a, b, 1845.

Murex (Chicoreus) territus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 73, 1853, 1858; Kobelt, Catalog der Gattung Murex, in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 151, 1877; Tryon, Manual of Conchology, Vol. II, p. 91, pl. 15, fig. 152, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 62, No. 83, 1882.

Murex nubilus (= *territus*, jun.), Sowerby, Proc. Zool. Soc., London, p. 428, pl. 49, fig. 4, 1859.

Murex nubilus, Sowerby, Thes. Conch., Vol. IV, p. 7, Murex, pl. 9, fig. 71, 1879.

Murex territus, Sowerby, Thes. Conch., Vol. IV, p. 19, Murex, pl. 9, fig. 77, 1879; E. A. Smith, "Alert" Collections, p. 45, No. 17, 1884.

Habitat.—North Australia. (Lieutenant Ince, R.N.) Wide Bay and Port Curtis. (British Museum.) Between Home Islands and Cape Grenville, North East Coast of Australia, now North Queensland, 20–30 fathoms, sandy-mud bottom, brought up on the tangles. (J. Brazier, "Chevert" Expedition.) Port Molle, 15 fathoms, and Port Curtis, 0–11 fathoms. (Dr. R. W. Coppinger.) Port Curtis. (A.M.)

This species was inadvertently omitted from my list of Muricidæ collected during the "Chevert" Expedition, Proceedings of the Linnean Society of New South Wales, Vol. I, pp. 169, 172. And it is not found at Sydney, Australia, as quoted by Mr. Tryon in his Manual of Conchology, Vol. II, p. 91.

PHYLLONOTUS, Swainson, 1840; *MURICANTHUS*, Swainson, 1840; *CENTRONOTUS*, Swainson, 1835.*

Murex Stainforthi, Reeve.

Murex Stainforthi, Reeve, Proc. Zool. Soc., p. 104, 1842; Conch. Icon., Vol. III, pl. 17, fig. 68, 1845; Sowerby, Thes. Conch., Vol. IV, p. 36, Murex, pl. 16, fig. 158, 1879.

Murex (Phyllonotus) Stainforthi, H. and A. Adams, Genera of Recent Mollusca, Vol. II, Part III, p. 74, 1853, 1858; Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 158, 1877; Tryon, Manual of Conchology, Vol. II, p. 104, pl. 26, fig. 237, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 83, No. 138, 1882.

Murex (Bassia) Stainforthi, Bayle, 1880 in Fischer Manuel de Conchyliologie, Fascicule, VII, p. 641, 1884.

* This name had been previously given to a genus of Fishes in 1801.

Habitat.—Nicol Bay, North West Australia. (W. H. Hargraves.) Port Darwin and Port Essington, North Australia. (T. W. Bednall and E. Spalding.) Two specimens are represented in the Museum of the Jardin des Plantes, Paris, said to have been found in New Caledonia. (M. J. Poirier.)

Murex endivia, Lamareck.

Martini, Conch. Cab., Vol. III, pl. 107, fig. 1008, 1777.

Murex cichoreum, Gmelin, Syst. Nat., p. 3530.

Murex endivia, Lamareck, Anim. sans Vert., Vol. VII, p. 168, 1822; edit. Deshayes; Vol. IX. p. 583. Crouch; Lamareck, Conch., pl. 18, fig. 1. Deshayes, Enc. Meth., Vers. III, p. 902. Sowerby, Conchological Illustrations, No. 92, 1841; Kiener, Iconographie Coquilles Vivantes, p. 52, pl. 35, fig. 1, 1842; Reeve, Conch. Icon., Vol. III, pl. 7, fig. 27, b, c, d, 1845; Kuster, Conch. Cab., 2nd edition, p. 42, pl. 17, fig. 7. Sowerby, Thes. Conch., Vol. IV, p. 32, Murex, pl. 16, figs. 153, 154, 1879; Gatliff, List of some shells of the Marine Mollusca found on the Victorian Coast, Victorian Naturalist, Vol. IV, p. 57, No. 4, 1887.

Murex saxatilis, Wood, Index. Testac., pl. 25, fig. 8.

Murex (Phyllonotus) endivia, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 158, 1877; Tryon, Manual of Conchology, Vol. II, p. 102, pl. 26, fig. 227, 1880.

Habitat.—Portland Bay, Victoria, Southern Australia. (J. A. Gatliff.)

This species was sent to me for name some years ago by Mr. Gatliff, who informed me that he obtained it at the above locality. Since then, I have been informed that it was brought with other shells from the Indian Ocean. Probably, the species may be found on the west or north-west coast of Australia, but I have not seen any species like it from there.

Murex umbilicatus, Tenison-Woods.

Murex scalaris, A. Adams (non Brocchi), Proc. Zool. Soc., London, p. 71, 1853; Angas (non Brocchi), Marine Molluscan Fauna of South Australia, Proc. Zool. Soc., London, p. 157, No. 5, 1865.

Trophon umbilicatus, Tenison-Woods, Papers and Proceedings of the Royal Society of Tasmania, p. 135, 1875, 1876. Census; with brief descriptions of the Marine Shells of Tasmania and the adjacent islands. Papers and Proceedings of the Royal Society of Tasmania, p. 26, 1877, 1878.

Murex (Muricidea) scalaris, Brazier (non Brocchi), "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 172, No. 13, 1875, 1877.

Murex (Ocinebra) scalaris, Kobelt (non Brocchi), Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 248, No. 227, 1877.

Murex (Phyllonotus) Angasi, Tryon (non Crosse), Manual of Conchology, Vol. II, p. 109, 1880.

Murex (Phyllonotus) octogonus, Bednall (non Quoy and Gaimard), Transactions and Proceedings and Reports of the Royal Society of South Australia, Vol. VIII, p. 64, 1884, 1885 (issued May, 1886).

Habitat.—Moreton Bay, Queensland. (Mr. F. Strange.) St. Vincent's Gulf, South Australia, "dredged along with horny zoophytes and nullipores at a depth of seven or eight fathoms" (Angas, Tate, Bednall). Darnley Island, Torres Straits, 30 fathoms, sandy bottom. (J. Brazier.) Barran Island, Bass Strait. (Mr. W. Legrand, 1873.) Giles Point, near Coobowie, St. Vincent's Gulf, off the rocks below low water mark. (Mr. E. H. Matthews, 1891.) Trowbridge Island, St. Vincent's Gulf, off the beach, also dredged in life from 4 to 10 fathoms; fair specimens from Hardwicke Bay, Spencer's Gulf. (Mr. E. H. Matthews, 1892.) East Coast of Tasmania. (Mr. W. Legrand.) North Coast of Tasmania from Port Sorell to a few miles west of the River Leven, specimens generally very much beach worn. (Miss Mary Lodder, August, 1892.)

PTERONOTUS, Swainson, 1840.

Murex Bednalli, Brazier.

Murex (Pteronotus) Bednalli, Brazier, Proc. Linn. Soc., New South Wales, Vol. II, p. 6, 1877; Angas, Proc. Zool. Soc., London, p. 418, pl. 45, fig. 2, 1880; Brazier, Proc. Linn. Soc., New South Wales, Vol. V, p. 630, 1880; Tryon, Manual of Conchology, Vol. II, Addenda, p. 262, 1880.

Murex (Cerastoma) bednalli, Poirier, Revision des *Murex* du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 98, No. 185, 1882.

Habitat.—Port Darwin, Northern Territory. (T. W. Bednall.)

Murex triformis, Reeve.

Murex acanthopterus, Var., Sowerby, Conchological Illustrations, fig. 51, 1840.

Murex triformis, Reeve, Proc. Zool. Soc., London, p. 87, 1845; Reeve, Conch. Icon., Vol. III, pl. 13, fig. 53, 1845; Kuster, Conch. Cab., 2nd edition, p. 85, pl. 30, fig. 4.

Murex (Pteronotus) triformis, Angas, Proc. Zool. Soc., London, p. 157, 1865; Schmeltz, jr., Museum Godeffroy Catalog V, p. 131, No. 6,291, 1874; Kobelt, Jahrb. d. deutsch. malak. Gesellsch., p. 161, No. 138, 1877;

Tryon, Manual of Conchology, Vol. II, p. 85, pl. 40, fig. 511, 1880, 1882; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 92, No. 162, 1882; Bednall, Transactions and Proceedings and Report of the Royal Society of South Australia, Vol. VIII, p. 63, 1885 (1836); Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 156, 1886.

Murex triformis, Sowerby, Thes. Conch., Vol. IV, p. 21, pl. 2, Murex, fig. 92, pl. 13, fig. 126, 1879.

Habitat.—Port Lincoln, Spencer's Gulf, South Australia (A.M.), on oyster-banks, from 2 to 10 fathoms. (G. F. Angas.) Off East Moncœur Island, Bass Strait, 38 fathoms, sand and shells. (H.M.S. "Challenger.") Tasmania.

***Murex acanthopterus*, Lamarck.**

Murex acanthopterus, Schröter, Einleitung in die Conchylien-Kenntniss, Vol. I, pl. 3, fig. 8, 1783; Lamarck, Anim. sans Vert., Vol. VII, p. 165 (edit. Deshayes), Vol. IX, p. 577; Sowerby, Conchological Illustrations, species 59, fig. 85, 1840; Kiener, Iconographie Coquilles Vivantes, p. 105, pl. 38, fig. 2, 1842; Reeve, Conch. Icon., Vol. III, pl. 16, fig. 64, 1845; Wood, Index Testaceologicus (edit. Hanley), p. 132, pl. 27, fig. 91, 1856; Kuster, Conch. Cab., 2nd edition, p. 98, pl. 34, fig. 2. Sowerby, Thes. Conch., Vol. IV, p. 21, pl. 10, Murex, fig. 90, pl. 13, fig. 127, 1879.

Murex (Pteronotus) acanthopterus, Angas, Port Jackson Mollusca, Proc. Zool. Soc., London, p. 186, 1867; Kobelt, Jahrb. d. deutsch. malak. Gesellsch., p. 238, No. 141, 1877; Tryon, Manual of Conchology, Vol. II, p. 85, pl. 40, fig. 512, 1880; Dunker, Index Molluscorum, Maris Japonici, p. 5, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum, D'Histoire Naturelle, Deuxième Série, Tome V, p. 91, No. 161, 1882; Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 155, 1886.

Murex (Alipurpura) acanthopterus, Bayle, 1884, in Fischer, Manuel de Conchyliologie, Fascicule VII, p. 641, 1884.

Habitat.—Watsons's Bay, Middle Harbour, Bottle and Glass Rocks, Port Jackson; Port Stephens, New South Wales, under stones low water spring tides. (J. Brazier.) Near Cape York, Queensland, 6 fathoms, Coral mud. (H.M.S. "Challenger.") Broken Bay. (A.M.) Japan? (Dr. G. Dunker.)

Murex pellucidus, Reeve.

Murex trigonularis, Sowerby (not of Lamarck), Conchological Illustrations, species 56, fig. 107, 1840.

Murex pellucidus, Reeve, Proc. Zool. Soc., London, p. 87, 1845; Reeve, Conch. Icon., Vol. III, pl. 14, fig. 54, 1845; Kuster, Conch. Cab., 2nd edition, p. 96, pl. 33, fig. 7.

Murex (Pteronotus) pellucidus, Brazier, "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 171, No. 9, 1875, 1877; Kobelt, Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 160, not 130, 1877; Tryon, Manual of Conchology, Vol. II, p. 87, pl. 41, fig. 530, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 91, No. 160, 1882.

Habitat.—Darnley Island, Torres Straits, 30 fathoms, white, sandy mud bottom, brought up in the tangles. (J. Brazier, "Chevert" Expedition.)

Murex osseus, Reeve.

Murex osseus, Reeve, Proc. Zool. Soc., London, p. 87, 1845; Conch. Icon., Vol. III, pl. 14, fig. 60, 1845; Kuster, Conch. Cab., 2nd edition, p. 92, pl. 32, fig. 8. Sowerby, Thes. Conch., Vol. IV, p. 21, pl. 10, Murex, fig. 91.

Murex (Pteronotus) osseus, Kobelt, Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 160, No. 131, 1877; Tryon, Manual of Conchology, Vol. II, p. 87, pl. 41, fig. 525, 1880; Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième, Série V, p. 93, 1882.

Habitat.—Nicol Bay, north-west coast of Australia. (A.M.) (W. H. Hargraves.)

Murex Angasi, Crosse.

Typhis Angasi, Crosse, Journal de Conch., Vol. XI, p. 86, pl. 1, fig. 2. 1863.

Murex (Pteronotus) angasi, Angas, Proc. Zool. Soc., London, p. 186, No. 5, 1867.

Murex zonatus, Tenison-Woods, Proc. Roy. Soc., Tasmania, p. 132, 1876.

Typhis Angasi, Crosse, Kobelt in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 288, No. 2, 1877.

Murex eos, Hutton, Journal de Conch., Vol. XVIII, 3rd series, p. 12, 1878.

Murex Angasi, Sowerby, Thes. Conch., Vol. IV, p. 26, pl. 21, Murex, fig. 189, 190, 1879.

Murex (Pteronotus) angasi, Tryon, Manual of Conchology, Vol. II, p. 88, pl. 40, fig. 522, 1880; Poirier, Revision des Murex du Muséum,

Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 95, 1882; Bednall, Transactions and Proceedings and Report of the Royal Society of South Australia, Vol. VIII, p. 64, 1885 1886; Brazier, Proc. Linn. Soc. of New South Wales, Vol. II (2nd series), p. 993, No. 2, 1887.

Habitat.—Port Jackson, Broken Bay. (A.M.) Port Stephens, New South Wales; Tasmania; Victoria; South Australia; New Zealand; Norfolk Island.

***Murex bipunctatus*, Sowerby.**

Murex bipunctatus, Sowerby, Thes. Conch., Vol. IV, p. 22, pl. 21, *Murex*, fig. 188.

Murex (Pteronotus) bipunctatus, Tryon. Manual of Conchology, Vol. II, p. 85; pl. 40, fig. 509, 1880; Poirier, Revision des *Murex* du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 95, 1882.

Habitat.—Australia. (G. B. Sowerby.)

***Murex cordismei*, Watson.**

Murex (Pteronotus) cordismei, Watson, Prelim. Report, Part XV, Journal Linnean Society, London, Vol. XVI, p. 601. Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 156, pl. 10, fig. 5, 1886.

Habitat.—Off East Moncœur Island, Bass Strait, 38 fathoms, sand and shells. (H.M.S. "Challenger.")

***HOMALOCANTHA*, Mörch, 1852.**

***Murex varicosus*, Sowerby.**

Murex varicosus, Sowerby, Proc. Zool. Soc., London, p. 145, 1840; Sowerby, Conchological Illustrations, species 76, fig. 49, 1841; Kiener, Iconographie Coquilles Vivantes, p. 91, pl. 28, fig. 2, 1842; Reeve, Conch. Icon., Vol. III, pl. 12, fig. 49, 1845; Sowerby, Thes. Conch., Vol. IV, p. 31, *Murex* pl. 15, fig. 139, 1879.

Murex (Homalocantha) varicosus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, part III, p. 74, 1853, 1858; Kobelt, Catalog der Gattung *Murex* in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 159, No. 121, 1877; Tryon, Manual of Conchology, Vol. II, p. 99, pl. 25, fig. 224, 1880; Poirier, Revision des *Murex* du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 89, No. 154, 1882.

Habitat.—Nicol Bay, North-west Australia. (W. H. Hargraves, A.M.)

OCINEBRA, Leach, 1847 ; *TRITONALIA*, Fleming, 1848.

***Murex tetragonus*, Broderip.**

Murex tetragonus, Broderip, Proc. Zool. Soc., London, p. 174, 1832 ; Sowerby, Conchological Illustrations, species 111, figs. 25, 36, 1841 ; Kiener, Iconographie, Coquilles, p. 87, pl. 5, fig. 2, 1842 ; Kuster, Conch. Cab., 2nd edition, p. 65. pl. 24, fig. 3.

Murex (Ocinebra) tetragonus, H. and A. Adams, Genera of Recent Mollusca, Part IV, Vol. I, p. 75, 1853 ; Schmeltz, jr., Museum Godeffroy, Catalog V, p. 131, No. 3,900, 1874 ; Kobelt, Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 252, No. 261, 1877 ; Brazier, "Chevert" Expedition, Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 171, No. 10, 1877, 1878 ;

Murex tetragonus, Sowerby, Thes. Conch., Vol. IV, p. 40, No. 188, *Murex*, pl. 33, fig. 228, 1879 ; Liénard, Catalogue de la Faune Malacologique, de l'île Maurice, p. 2, No. 15, 1877.

Murex (Ocinebra) tetragonus, E. v. Martens in Möbius Beiträge zur Meeres-fauna der Insel Mauritius und der Seychellen, p. 232, 1880 ; Tryon, Manual of Conchology, Vol. II, p. 121, pl. 36, fig. 424, 1880.

Murex (Pteronotus) tetragonus, Tapparone-Canefri, La Faune Malacologique de l'île Maurice, Mémoires de la Société Malacologique de Belgique, Tome XV (Deuxième Série, Tome V), p. 19, 1880.

Murex (Muricidea) tetragonus, Poirier, Revision des *Murex* du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome V, p. 102, No. 199, 1882.

Habitat.—Bet. Island, Torres Straits, 11 fathoms, sandy bottom. (J. Brazier.)

***Murex mundus*, Reeve.**

Murex exiguus, Reeve, Proc. Zool. Soc., p. ?, 1845. Reeve (non Broderip, Kiener nec Garrett), Conch. Icon., Vol. III, pl. 32, species 166, 1845.

Murex mundus, Reeve, Conch. Icon. (Errata in Index species 166).

Murex (Muricidea) mundus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 75, 1853, 1858 ; Brazier, "Chevert" Expedition, Shells, Proc. Linn. Soc., New South Wales, Vol. I, p. 172, No. 12, 1877, 1878.

Murex (Ocinebra) mundus, Kobelt, Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 249, No. 237, 1877 ; Tryon, Manual of Conchology, Vol. II, pl. 36, fig. 427, 1880.

Murex mundus, Sowerby, Thes. Conch., Vol. IV, p. 39, No. 182, *Murex*, pl. 33, fig. 242, 1879.

Habitat.—Darnley Island, Torres Straits, 20 fathoms, coral bottom. (J. Brazier.)

This species is not described in the Proc. Zool. Society, as quoted by Mr. Reeve in Conch. Icon.

***Murex Brazieri*, Angas.**

Murex Brazieri, Angas, Proc. Zool. Soc., London, p. 171, pl. 26, fig. 3, 1877 ; A further List of Additional Species of Marine Mollusca to be included in the fauna of Port Jackson and the adjacent coasts of New South Wales, Proc. Zool. Soc., London, p. 179, No. 12, 1877 ; Sowerby, Thes. Conch., Vol. IV, p. 42, species 200, *Murex*, pl. 33, fig. 226 enlarged, 1879 ; Whitelegge, List of the Marine and Fresh Water Invertebrate Fauna of Port Jackson and neighbourhood, Journal and Proceedings of the Royal Society, New South Wales, Vol. XXIII, p. 246, No. 209, 1889 ; Brazier, Journal of Conchology, Vol. VI, p. 66, 1889.

Murex (Ocenebra) Brazieri, Tryon, Manual of Conchology, Vol. II, p. 132, pl. 30, fig. 289, 1880.

Murex (Muricidea) Brazieri, Poirier, Révision des *Murex* du Muséum, Nouvelles Archives du Muséum d'Histoire Naturelle, Deuxième Série, Tome V, p. 104, No. 208, 1882.

Habitat.—Dredged outside Port Jackson Heads in 20 fathoms. (J. Brazier, 1873.) Middle Harbour, in shell sand. (Whitelegge.) South Australia. (W. T. Bednall.) (A.M.)

This species was sent to me by Mr. Bednall as the young of *Murex pumilus*, A. Adams, the latter species not being found in South Australia, but in China and Darros Island, Amirantes, in 22 fathoms.

***Murex planiliratus*, Reeve.**

Murex planiliratus, Reeve, Conch. Icon., pl. 31, fig. 149, 1845.

Murex (Ocenebra) planiliratus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 75, 1853, 1858 ; Kobelt, Catalog der Gattung *Murex* in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 248, No. 226, 1877.

Murex planiliratus (Hinds?), Sowerby, Thes. Conch., Vol. IV, p. 49, *Murex*, pl. 24, fig. 264, 1879.

Coralliophila costularis, Tryon (non Lamarek), Manual of Conchology, Vol. II, p. 208, pl. 65, fig. 366, 1880.

Murex (Ocinebra) planiliratus, Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum d'Histoire Naturelle, Deuxième Série, Tome V, p. 126, No. 285, 1882.

Habitat.—Swan River, Western Australia. (Reeve.) Near Fremantle. (Dr. J. C. Cox, 1892.)

***Murex serotinus*, A. Adams.**

Murex serotinus, A. Adams, Proc. Zool. Soc., London, p. 268, 1851.

Murex (Ocinebra) serotinus, H. and A. Adams, Genera of Recent Mollusca, Vol. I, Part III, p. 75; 1853, 1858.

Murex serotinus, Angas, Molluscan Fauna of South Australia, Proc. Zool. Soc., London, p. 157, No. 4, 1865.

Murex serotinus=*Blainvillei*? Sowerby in Thes. Conch., Vol. IV, index p. 54, 1879.

Murex serotinus=*Murex cristatus* Var. *Blainvillei*, Tryon in Manual of Conchology, Vol. II, p. 254 index, 1880.

Murex serotinus, Bednall, Transactions and Proceedings and Report of the Royal Society of South Australia, Vol. VIII, p. 66, 1884-5, issued May, 1886.

Habitat.—Aldinga Bay, South Australia. (G. F. Angas.)

VITULARIA, Swainson, 1840.

***Vitularia miliaris*, Gmelin.**

Murex Purpura scabra, Chemnitz, Conch. Cab., Vol. X, pp. 234, 246, pl. 161, fig. 1,532, 1,535; 1788.

Murex miliaris, Gmelin, Syst. Nat., Vol. I, Part VI, p. 3,536, No. 39, 1790; Dillwyn, Descriptive Catalogue of Recent Shells, Vol. II, p. 685, No. 10, 1817.

Murex vitulinus, Lamarek, Tableau Encyclopédique Méthodique, pl. 419, fig. 1, a b; 7 a b, 1816; Lamarek, Anim. sans Vert., Vol. VII, Part I, p. 173, No. 53, 1822; 2nd edition Deshayes, Vol. IX, p. 595, No. 53, 1843. Deshayes, in Encyclopédie Méthodique, Histoire Naturelle des Vers, Vol. III, p. 905, No. 24, 1832; Kiener, Coquilles Vivantes, p. 123, pl. 47, fig. 2, 1842; Menke, Molluscorum Novæ Hollandiæ, p. 24, No. 114, 1843; Kuster, Conch. Cal., 2nd edition, p. 48, pl. 19, figs. 5, 8.

Murex Purpura, Reeve, Conch. Icon., Vol. III, pl. 25, fig. 102, 1845.

Vitularia miliaris, Kobelt. Catalog der Gattung Vitularia in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 252, No. 1, 1877.

Murex (Vitularia) miliaris, Tryon, Manual of Conchology, Vol. II, p. 133, pl. 35, figs. 393, 387; 1880.

Habitat.—Nicol Bay North, West Australia; Osnaburg Point, Albany Pass, Cape York, North Queensland found under stones at low water. (J. Brazier, "Chevert" Expedition, 1875.)⁴ Torres Straits. (W. H. Hargraves, A.M.)

This species was inadvertently omitted by me from the Muricidæ of the "Chevert" Expedition Proceedings of the Linnean Society of New South Wales, Vol. I, pp. 169, 172; 1875, 1877.

PSEUDOMUREX, Monterosato, 1872.

Murex pholidotus, Watson.

Murex (Ocinebra) pholidotus, Watson, Prelim. Report, part 15, Journal Linnean Society, London, Vol. XVI, p. 602, 1883.

Murex (Pseudomurex) pholidotus, Watson, Report on the Gasteropoda Voyage of H.M.S. "Challenger" Zoology, Vol. XV, p. 158, pl. X, fig. 3, 1886.

Habitat.—Flinders Passage, Cape York, Torres Straits, 7 fathoms. (H.M.S. "Challenger.")

Murex polypleurus, Brazier, N. Sp.

Murex polypleurus, Brazier, Proc. Linn. Soc., New South Wales, Second Series, Vol. VIII, Part I, 1893.

Habitat.—MacDonnell, Fowler's Bay (Professor Tate). East side of St. Vincent's Gulf, South Australia (G. F. Angas). Port Lincoln (W. T. Bednell).

TYPHIS, Montfort, 1810.

Typhis arcuatus, Hinds.

Typhis arcuatus, Hinds, Proc. Zool. Soc., London, p. 19, 1843. Hinds, Voyage of H.M.S. "Sulphur," Mollusca, p. 10, pl. 3, fig. 1, 2; Sowerby, Thes. Conch., Vol. III, p. 320, No. 11, Thes. pl. 284, fig. 3, 4, 5; Reeve, Conch. Icon., Vol. XIX, pl. 3, fig. 10, 1874; Tenison-Woods, Papers and Proceedings Royal Society, Tasmania, p. 132, 1876; Kobelt, Catalog der Gattung Typhis in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 289, No. 14, 1877; Brazier, Proc. Linn. Soc., New South Wales, Vol. IV, p. 428; 1879, 80.

Typhis Japonicus, A. Adams, Proc. Zool. Soc., London, p. 374, 1862.

Typhis arcuatus, Tryon, Manual of Conchology, Vol. II, p. 136, pl. 30, fig. 293, 1880; Whitelegge, List of the Marine and Fresh Water Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 246, No. 211, 1889.

Habitat.—Cape of Good Hope, dredged on the L'Agulhas Bank, in from 40 to 44 fathoms (Mr. R. B. Hinds). Outer North Head of Port Jackson, near the rocks, 5 fathoms sand and shells, "Sow and Pig's Reef," 3 fathoms (J. Brazier, 1865). Long Bay, Bruny Island, Tasmania, 10 fathoms, sand bottom (Rev. H. D. Atkinson). Japan (A. Adams).

***Typhis Cleryi*, Sowerby.**

Typhis Cleryi, Sowerby (non Petit), Thes. Conch., Vol. III, p. 320, Thes. pl. 284, fig. 14.

Typhis Clerii.—Sowerby in Reeve, Conch. Icon., Vol. XIX, pl. 3, fig. 11, 1874.

Typhis Cleryi.—Brazier (non Petit), Proc. Linn. Soc., New South Wales, Vol. I, p. 9, 1875, 1877; Tryon (non Petit), Manual of Conchology, Vol. II, p. 137, pl. 30, fig. 302, 1880; Hutton (non Petit), Manual of the New Zealand Mollusca, p. 47, 1880.

Typhis philippensis, Watson, Prelim. Report, Part XV, Journal Linnean Society, London, Vol. XVI, p. 605, 1883; Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. XV, p. 162, pl. 10, fig. 4, 1886.

Typhis Cleryi, Sowerby, Whitelegge, List of the Marine and Fresh Water Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society, New South Wales, Vol. XXIII, p. 246, No. 210, 1889.

Habitat.—Off Sydney Heads, 5 miles due east, 45 fathoms sandy bottom, June 3rd, 1874; Jervis Bay, 70 miles south of Sydney, 11 fathoms sand and gravel, October 24, 1874. (J. Brazier.) (A.M.) Station 161, April 1, 1874. Lat. 38° 30' S., long. 144° 36' 30" E. Off the entrance to Port Phillip, Melbourne, 33 fathoms sand. (H.M.S. "Challenger.")

This species is not found in New Zealand as quoted by Mr. Sowerby in the Thesaurus Conchyliorum and the Conchologia Iconica on the authority of Mr. G. F. Angas, the specimen came from New South Wales.

Typhis Cleryi, Petit, 1840, is a synonym of *Typhis Belcheri*, Broderip, 1832.

Typhis philippensis, Watson, cannot be separated from *Typhis Cleryi*, Sowerby.

Typhis Yatesi, Crosse.

Typhis Yatesi, Crosse, Journal de Conch., Vol. XIII, p. 54, pl. 2, fig. 3, 1865; Angas, Molluscan Fauna of South Australia, Proc. Zool. Soc., London, p. 158, No. 7, 1865; Sowerby, Thes. Conch., Vol. III, p. 319, Thes., pl. 284, figs. 20, 21; in Reeve, Conch. Icon., Vol. XIX, pl. 3, fig. 14, 1874.

Typhis Yatesii, Kobelt, Catalog der Gattung Typhis in Jahrb. d. deutsch. malak. Gesellsch., Vol. IV, p. 288, No. 3, 1877; Tryon, Manual of Conchology, Vol. II, p. 137, pl. 30, fig. 294, 1880.

Typhis Yatesi, Bednall, Transactions and Proceedings and Report of the Royal Society of South Australia, Vol. VIII, p. 66, 1884-5, issued May, 1886.

Habitat.—Holdfast Bay, Semaphore, St. Vincent's Gulf, South Australia. (Angas, Tate, Bednall, Forwood.) Stansbury, South Australia. (Professor Tate.)



